Regional Plan for Texas Higher Education

(in response to HB 1799, 77th Texas Legislature)

December 5, 2002

Texas Higher Education Coordinating Board
P.O. Box 12788
Austin, TX 78711
(512) 427-6101
http://www.thecb.state.tx.us

The Texas Higher Education Coordinating Board

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Mission of the Coordinating Board

The Texas Higher Education Coordinating Board's mission is to work with the Legislature, Governor, governing boards, higher education institutions and other entities to provide the people of Texas the widest access to higher education of the highest quality in the most efficient manner.

Philosophy of the Coordinating Board

The Texas Higher Education Coordinating Board will promote access to quality higher education across the state with the conviction that access without quality is mediocrity and that quality without access is unacceptable. The Board will be open, ethical, responsive, and committed to public service. The Board will approach its work with a sense of purpose and responsibility to the people of Texas and is committed to the best use of public monies. The Coordinating Board will engage in actions that add value to Texas and to higher education; the agency will avoid efforts that do not add value or that are duplicated by other entities.

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Executive Summary

This report is provided in response to House Bill 1799, of the 77th Texas Legislature, requiring the Coordinating Board to develop a long-range plan for higher education, by region. The report represents one of the key roles of the Coordinating Board: to provide information on the status of higher education throughout the state.

A wide variety of factors related to higher education were reviewed for this report. The factors include educational attainment of the current and projected population, existing degree programs, programs where significant unmet need may exist, programs provided by independent institutions, and geographic areas of the state which may have a greater need for higher education services (based on the current and projected population, distance from other educational resources, and economic trends).

The following are some of the general demographic observations:

- The state's population, particularly the age 15-to-34 group, is expected to increase significantly in the Central, Gulf Coast, Metroplex, South Texas, and Upper Rio Grande regions (representing 95 percent of the state's total growth and 88 percent of the 15-34 population growth). These five regions were labeled high growth regions.

- Three regions, the Metroplex, Gulf Coast, and South Texas regions, account for almost 80 percent of the targeted enrollment growth statewide.

- If the state's public colleges and universities achieve the enrollment targets they reported in response to Closing the Gaps by 2015, enrollment growth will be greatest in the Metroplex, Gulf Coast, and South Texas regions at both the universities and two-year colleges.

Overall, a broad range of educational opportunities are available to students in all regions. The state has two underlying issues: 1) critical field areas where programs are available, but students are not enrolling and graduating in sufficient number to meet job market demand; and 2) offering high demand programs in regions where they are not currently available. Several observations specifically related to higher education are provided:

- In high growth regions, community colleges may require state assistance if facilities are to accommodate the new students expected.

- The state is estimated to have a space deficit of 15 million square feet, with 11.9 million square feet of that amount in the high growth regions, if universities continue to deliver services in the same manner.

- Community colleges will need more than an estimated 11,000 additional faculty and universities will need an estimated additional 10,000 faculty by 2015 if enrollment targets are achieved.

- High-demand baccalaureate and master's level programs are available in most regions.

- Two-year colleges continue to work closely with stakeholders in their communities and regions. For this reason, the degree programs provided by two-year colleges were not reviewed in this plan.

The report concludes with the following considerations:

- The Coordinating Board should conduct a study of maintenance costs, capacity, and facility needs of public community colleges. Large increases in community college enrollments may be stretching resources at community colleges in high-growth areas. The study should consider the question of providing partial state funding of community college facilities and the feasibility of using the state's electronic admission's application to refer students to institutions with available facilities or to offer incentives for students to attend those institutions with existing capacity.

- The Coordinating Board should work with universities and community college districts in identifying opportunities to increase effective and efficient utilization of existing facilities.

- The Coordinating Board should study future faculty needs at all levels of higher education throughout the state.

- Some program areas are available in all regions, but increased effort needs to be made to enroll and graduate additional students.

- Program areas without sufficient student demand in a region may be delivered through distance education/electronic delivery until student demand in the region is sufficient to justify a new program.

- The Coordinating Board methodology for determining the need for additional professional schools should be applied before the creation of any new professional schools.

- Institutions within each region should work together to review high demand programs missing from their region to determine need and student interest before bringing forward new programs for program review and approval. Coordinating Board staff plan to hold meetings with representatives of institutions in each region to discuss how institutions can best work together to identify and address any unmet high demand degree program needs in their regions. Program proposals submitted to address unmet needs would go through the Coordinating Board's normal review and approval process.

House Bill 1799: Regional Plan for Texas Higher Education

Through House Bill 1799[1], the 77th Texas Legislature directed the Coordinating Board to "develop a long-range statewide plan to provide information and guidance to policy makers to ensure that institutions of higher education meet the current and future needs of each region of this state for higher education services and that adequate higher education services at all levels are reasonably and equally available to the residents of each region of this state."

The legislation requires the Coordinating Board to review:

- The educational attainment of the current population, as well as the extent to which residents attend higher education institutions outside the area or do not attend higher education institutions anywhere.
- Existing undergraduate, graduate, professional, and research programs
- Programs or fields of study in an area projected to have significant unmet need
- Geographic areas of the state likely to have significantly greater need for higher education services (factors may include the current population, projected population, distance from other educational resources, and economic trends)
- Higher education services provided by independent institutions

A key role of the Coordinating Board is to provide information, through this and other efforts, on the status of higher education throughout the state. This plan serves as a starting point for analyzing higher education opportunities at universities by focusing on existing and potential degrees available throughout the state and by region, particularly for geographic areas of the state most likely to experience the greatest need. A regional approach allows a detailed examination of the state's higher education opportunities, but should not be considered apart from a comprehensive analysis in determining statewide policy in higher education. This plan is not a forecast of degree program needs or demands, nor does it attempt to address economic stimulation and growth through higher education. However, such forecasts and related impact issues may be incorporated in future reports.

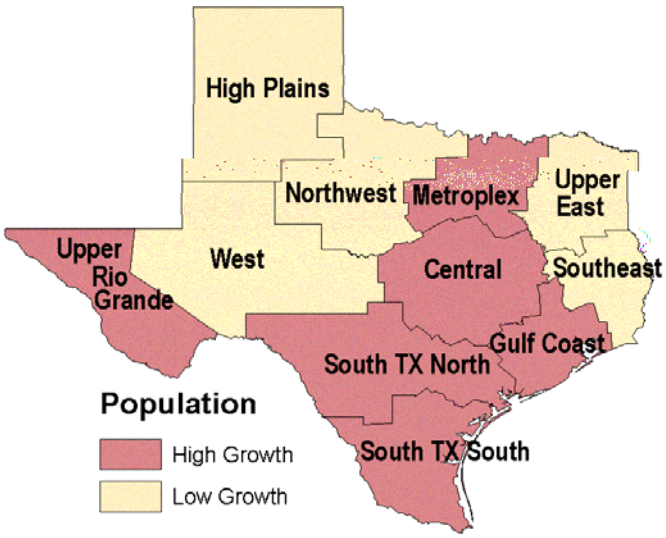
The importance of two-year colleges in both job preparation and entry into further education is recognized in this plan. The review of degree opportunities also considers current and projected student participation rates, demographics, and areas of predicted job-growth. The matching of degree programs with workforce predictions of high-growth areas is a third research opportunity for a future report. For now, as noted in the Regional Analysis section, the Coordinating Board has relied upon the State Comptroller's *Texas Regional Outlook Reports*, published summer 2002 and available at http://www.window.state.tx.us/ecodata/regional/.

The result of this review of existing degree opportunities is designed to identify potential higher education delivery gaps so that the higher education community can work together to identify and establish the high-demand programs necessary to meet Texas' higher education needs.

1 Codified as Section 61.051, Texas Education Code.

Regional Analysis

For the past several years, the Coordinating Board has provided statewide and regional higher education data and analysis. Boundaries for the 10 regions were adopted from the State Comptroller's 13 regions and the Texas Workforce Commission's 28 local workforce development areas. In recognition of the large geographic area included in the South Texas region, more-detailed information is frequently provided in the form of South Texas-North and South Texas-South in this plan.



Five regions in the state (Central Texas, Gulf Coast, Metroplex, South Texas, and Upper Rio Grande) are projected to have the largest increases in the total 15-to-34 population and the Hispanic 15-to-34 population (88 percent of the state's growth), as well as the greatest increases in total population (numerically and as a percent of change). In addition, 95 percent of the total population growth between 2000 and 2015 is expected in the same five regions (Central Texas, Gulf Coast, Metroplex, South Texas, and Upper Rio Grande). Also, if institutions reach the enrollment targets they established for the *Closing the Gaps* education plan, college enrollments will increase the most – accounting for 80 percent of the targeted growth statewide – in the Metroplex, Gulf Coast, and South Texas regions at both the university and two-year college levels. Degree programs at the baccalaureate, masters, and doctoral level were reviewed for these regions.

The other five regions of the state (High Plains, Northwest Texas, Southeast Texas, Upper East Texas, and West Texas) are expected to have a much lower growth rate. Although these regions are not expected to experience high levels of population growth, they are still extremely important. The institutions within these regions provide a solid foundation and assortment of educational services. As an example, Texas Tech University provides a broad range of educational opportunities throughout the High

Plains region and offers numerous outreach programs beyond the region. Degree programs were reviewed at the baccalaureate, masters and doctoral level for these regions.

Each region of the state must overcome a different set of challenges to provide quality higher education opportunities. This plan provides an initial review of some of the advantages and challenges the state's regions are expected to face as related to higher education. Appendix A includes background data for each of the regions. The two groups of regions are differentiated, as suggested in the legislation directing this report, by focusing on geographic factors likely to reflect a significantly greater need for higher education services (such as the current population, projected population, distance from other educational resources, and economic trends).

Availability of Degree Programs

General. An analysis of degree programs available at public universities and health-related institutions statewide and regionally, with a focus on the five geographic areas with the greatest need for higher education opportunities, is part of this plan.

Certificate and associate degree programs were not considered because two-year colleges and their communities effectively identify instructional areas required to meet local demand. It is important to acknowledge the increasing efforts of two- and four-year institutions in developing partnership agreements designed to make transfer among institutions more efficient. These include traditional articulation agreements, multi-institution teaching centers, and concurrent or guaranteed admission programs. Decisions regarding which program to offer where will increasingly blend some traditional community college and university offerings.

The database of current degree programs was reviewed by region, with particular attention provided to high-demand programs. With more than 4,000 programs available, many degree programs have small enrollments and even fewer graduates. While these programs make an important contribution to the state, this plan focuses on the programs sought by the largest number of students.

Overall, a broad range of educational opportunities are available to students in all regions, but there are two underlying issues for the state. First, there are critical discipline areas (mathematics, teaching, nursing) where programs are available, but students are not enrolling and graduating in sufficient numbers to meet job market demand. Second, high-demand programs should be available in regions where they are not currently available, as justified by student interest and community need.

Multi-Institutional Partnerships and Distance Delivery. Distance education (including electronic methods of course delivery) and multi-institutional partnerships are increasingly important for providing classes and complete degree programs through non-traditional means. Many institutions have partnerships with military installations, such programs offered by Angelo State University's at Goodfellow Air Force Base (AFB) and by Southwest Texas State University's at Kelly AFB, Randolph AFB, and Fort Sam Houston (U.S. Army) in San Antonio.

Several universities have partnered with other institutions in their region, and frequently the partnerships extend beyond regional boundaries. As one example, The University of Texas Health Science Center at Houston provides its master's degree in public community health program to students attending The University of Texas Southwestern Medical Center in Dallas, The University of Texas at El Paso, and The University of Texas Health Science Center at San Antonio.

Many distance education programs and partnerships are not bound by geography. Undergraduate and graduate degrees are available on the internet, providing access to anyone in the state and beyond. These programs include Stephen F. Austin's master's degree in elementary education, Sam Houston State University's baccalaureate and masters degrees in criminal justice, Texas A&M University's master's degree in agricultural economics, and Texas Woman's University's baccalaureate degree in health

studies. Additional high-demand degree programs available through the Internet include a master's degree in software engineering from the University of Houston-Clear Lake, a master's degree in library science from the University of North Texas, and West Texas A&M University's master's degree in agriculture. A list of all distance delivery programs and off-campus instruction is provided in Appendix B.

Professional Degrees. In early 2002, the Coordinating Board developed a methodology to determine when and where new professional schools might be needed in the state. The methodology focuses on two areas: first, the need for professional services; and second, the opportunity for students throughout the state to pursue these professions.

The first report, focusing on the potential need for new medical schools in the state, was approved by the Coordinating Board in July. Among the findings of the report is recognition that before creating new medical schools, expanding existing schools, or starting new extension initiatives, the Legislature should ensure that existing schools and regional academic health centers have funding sufficient to support their missions. However, if additional medical schools are to be created, two areas of the state meet the criteria identified in the report: the Upper Rio Grande Region and the South Texas-South region. A copy of the recommendations from the report can be found online at http://www.thecb.state.tx.us/UHRI/ProfSchools.htm

The Coordinating Board approved two additional reports on the need for new professional schools in October 2002. First, the Board determined that there is no compelling need for the state to establish a new law school at this time. The people of Texas have average access to law schools compared to citizens of the ten most populous states, and the state's public and independent law schools are providing new lawyers in numbers that are approximately equal to the number of new law jobs. However, the Board recognizes that lawyers are not distributed evenly throughout the State, leaving citizens of some regions with less access to legal services. Additionally, some areas of the state are under-represented in the state's law school student population. To increase the state's supply of lawyers, the state could encourage moderate enrollment increases in the state's smaller public law schools, improve retention at schools with high attrition, and/or increase passing rates at law schools with lower passing rates on the State Bar Exam. Or, a special loan repayment program could be developed for lawyers practicing in underserved areas. Finally, programs could be established to increase enrollment of law students from underserved areas.

Second, the Coordinating Board looked at the statewide need for professional education in veterinary medicine. There does not appear to be a current need to create a new school of veterinary medicine in Texas, although there is maldistribution of veterinarians across regions of Texas and a shortage of veterinarians specializing in large animal medicine. Should it be determined that more veterinarians are needed, class capacity at Texas A&M University's College of Veterinarian Medicine could be increased by ten to 20 students. Additionally, a special loan repayment program could be developed to encourage veterinarians to practice large animal medicine in rural areas.

The following table provides information on current programs, population, and enrollment by region. Population figures are also projected for 2015. This information helps identify

five of the 10 regions of the state as “high-growth” in terms of population, and presents a brief overview of each of the regions.

Texas Higher Education Coordinating Board
Select Information by Region: Programs, Populations, and Enrollment

Total	Programs (2001, Duplicated)	Central	Gulf Coast	High Plains	Metroplex	Northwest	South Texas	Southeast Texas	Upper East Texas	Upper Rio Grande	West Texas
1,664	**Associate's (technical)**	220	323	85	343	64	284	73	141	55	76
1,923	**Baccalaureate**	325	332	177	389	44	292	140	56	94	74
1,727	**Master's**	328	341	155	386	25	244	80	43	85	40
567	**Doctoral**	211	106	60	157	0	20	4	0	9	0
22	**Professional**	5	8	4	3	0	2	0	0	0	0
Total	**Population 2000 & 2015**	**Central**	**Gulf Coast**	**High Plains**	**Metroplex**	**Northwest**	**South Texas**	**Southeast Texas**	**Upper East Texas**	**Upper Rio Grande**	**West Texas**
20,851,820	**Total 2000**	2,309,972	4,854,454	780,733	5,487,477	549,267	3,884,115	740,952	1,015,648	704,318	524,884
25,936,845	**Total 2015**	2,962,962	6,128,339	871,857	7,082,225	583,305	4,908,281	805,695	1,117,857	893,572	582,752
6,337,719	**Age 15-to-34, 2000**	795,352	1,480,588	232,319	1,703,687	152,548	1,147,183	202,035	264,770	213,221	146,016
7,457,981	**Age 15-to-34, 2015**	888,357	1,753,185	263,094	1,960,475	167,647	1,454,783	229,394	297,918	274,883	168,245
NA	**Age 15-to-34 Population of Border City (if any) 2000 *(Italics = Mexico)***	NA	NA	16,757 (Guymon OK, Clovis NM, Portales NM)	6,149 (Hugo OK, Durant OK)	13,229 (Ardmore OK, Frederick OK, Altus OK)	*579,437 (Acuna, Nuevo Laredo, Matamoras, Piedras Negras, Reynosa, Rio Bravo)*	74,554 (Shreveport LA, Bossier City LA)	9,345 (Texarkana LA, Idabel OK)	479,996 (Las Cruces NM, *Juarez)*	8,267 Hobbs NM
Total	**Enrollment 2001**	**Central**	**Gulf Coast**	**High Plains**	**Metroplex**	**Northwest**	**South Texas**	**Southeast Texas**	**Upper East Texas**	**Upper Rio Grande**	**West Texas**
909,083	**Total**	182,696	191,262	51,224	195,724	14,715	150,721	32,117	33,126	36,568	20,930
352,942	**University Undergraduates**	96,717	64,631	27,234	65,799	5,397	47,357	18,708	3,981	15,218	7,900
478,313	**Two-Year Colleges**	63,945	111,596	19,133	110,386	8,755	94,078	11,624	28,175	18,356	12,265
74,944	**Nonresdnt/Foreign**	19,165	19,884	4,053	17,408	847	5,576	1,134	1,948	4,277	652

High-Demand Degree Programs. High-demand degree programs were identified through a three-step process. First, all 2001 graduates of a public university or health-related institution (statewide) were grouped by their respective degree programs. High-demand degree programs were identified as those programs producing the following number of graduates statewide:

- 200 or more baccalaureate degrees
- 50 or more masters degrees
- 30 or more doctorates.

These criteria were based on professional judgments about the pool of students needed to make a new program successful. Because of differences in program lengths and the way programs are delivered and funded, more students are needed generally to make a baccalaureate program successful than needed to make a masters program successful, and more students are needed for a successful "stand-alone" masters program than for a doctoral program.

The second step was to review the degrees available in each region, including new programs which have been approved but have not yet produced graduates.

The third step was to determine programs for which an institution within the region currently has planning authority[2] or programs which are offered by an independent institution in the region. The Upper Rio Grande region is the only high-growth region that does not have an independent institution; Southeast Texas and West Texas also do not have independent institutions within their regional borders. Additional information regarding high-demand programs and the methodology applied to this plan is provided in Appendix C.

This analysis of high-demand degree programs provides a starting point for identifying potential gaps in higher education opportunities throughout the state. However, every degree program is not needed in every region of the state. A region of the state without a local chemical industry, for example, may have no workforce needs for doctorates in chemical engineering. While the Coordinating Board is prepared to support institutions interested in meeting unmet needs for degree programs, it does not take as a given that the gaps represent unmet need. Proposals for any new degree programs in these areas would have to meet all the Coordinating Board standards related to quality, cost, and need, including documented evidence that there is a state and regional need for the program.

There were only 54 degree programs that awarded at least 200 baccalaureate degrees between fall 2000 and summer 2001, indicating that most students are interested in a relatively few number of program areas. The same is true at the masters and doctoral levels. Across the state, 58 types of masters degree programs reached the statewide threshold of awarding 50 masters degrees (although they were in different program areas than the 54 most popular baccalaureate degree programs).

2 As a preliminary step, public universities and health science centers in the state may request "planning authority" to officially begin the process of planning for and preparing a proposal for a new degree program.

At the doctoral level, only 18 types of degree programs awarded 30 or more degrees statewide.

Most high-demand programs offered at the baccalaureate and masters level are readily available all over the state. The issue is in providing access which will satisfy the educational needs of communities and meet the interests of students. Unfortunately, providing access to programs does not always lead to more graduates in these critical fields. For example, nursing and education programs are widely available in every region of the state, but these disciplines do not attract and graduate enough students to meet the local and statewide employment needs. In addition, high-growth regions may require additional programs or services to meet expected increases in student demand.

Summary

- *High-demand baccalaureate and master's degree programs are available in most regions.*
- *Upper Rio Grande is the only region of the five fastest growing regions not to include an independent institution. Southeast and West Texas regions also do not have independent institutions.*
- *Some program areas are available in all regions, but increased effort is needed to enroll and graduate additional students.*
- *Multi-institutional partnerships and distance delivery programs will increasingly contribute to program opportunities throughout the state.*
- *The Coordinating Board methodology for determining the need for additional professional schools should be applied to a program area before the creation of any new professional schools.*

High-Demand Degree Areas

This plan reviews university-level programs available in all 10 regions of the state, but focuses on the five regions with the greatest projected population growth: Central Texas, Gulf Coast, Metroplex, South Texas, and the Upper Rio Grande. High-demand programs are most likely to be needed in these areas. Potential gaps in high-demand degree opportunities are outlined in this section of the plan. Although the Upper Rio Grande region has a relatively small population, it is included with the high-growth regions because of the high expected population growth of the region.

Recognizing that 88.6 percent of Texas students are undergraduates, special attention is given to gaps in the delivery of career-related undergraduate programs. Graduate programs (masters and doctorates) are important contributors to the higher education mix, but are more expensive and have less demand. Higher education leaders in all regions are encouraged to review the demand for new programs, and if there is adequate demand for a program, the Coordinating Board is prepared to join in the analysis and make further recommendations toward filling the gap.

The analysis here is intended as a first step. It identifies disciplinary areas that should be explored as possibilities for developing new degree programs. As possible degree gaps are identified, institutions within a region must work together and discuss many factors before a program is brought forward for approval. Institutions in each region are encouraged to review the high-demand programs not currently offered and identify those for which there is sufficient need to consider for development. Coordinating Board staff plan to hold meetings with representatives of institutions in each region to discuss how institutions can best work together to identify and address any unmet degree program needs in their regions. Before the Coordinating Board would approve such new programs, the institutions in the region should demonstrate there is a need for it, the program is consistent with the institution's mission, the institution has the resources necessary to offer a high quality program, and, finally, if the need is real, that it is the most appropriate institution in the region to offer the program. Program proposals submitted to address unmet needs would go through the Coordinating Board's normal review and approval process.

The tables below list the high-demand degree programs available in the five largest growth regions of the state by level (baccalaureate, master's, doctoral) followed by high demand baccalaureate and master's programs for the remaining five regions (distance delivery programs are not considered). Programs in regions which are not available are noted NA. The letter "P" indicates that an institution within the region has planning authority for the program, and the letter "I" indicates that an independent institution (but no public institutions) in the region offers the program. The institutions in each region should examine these program areas to see if there is sufficient need and student interest for the creation of a new program.

To provide a sense of degrees available throughout the state, the high-demand tables also identify total degrees by region as of August 2001. In regions where the same degree is offered by more than one institution, the degree is counted for each institution.

The total number of degree programs differs from the total number of degree programs listed on an institutions' table of degree programs authorized by the Coordinating Board. Although it may be possible eventually to tally degrees according to the table of programs, the current national CIP system and its application by individual institutions produces coding inconsistencies. For example, one institution may offer a single degree in Applied Music and another institution may award separate degrees for each musical instrument. Or, an institution may consider all programs in visual and performing arts as one degree, and another institution may separate drawing, printmaking, sculpture, and painting into four degrees. Additional information on the Coordinating Board's methodology for counting degree programs is provided in Appendix C.

Educational opportunities by program and institution are available online for Texas' public universities and public community, technical, and state colleges at the following Coordinating Board website: www.collegefortexans.com/library.

Baccalaureate High-Demand Program Offerings
Five Largest and/or High-Growth Regions

(Refer to the table on page 10 for total programs by region)

(✓ = program present, P = planning authority granted;
I = program offered by independent institution; NA = program not offered in region)

Title	Central	Gulf Coast	Metroplex	South TX	Upper Rio Grande
Advertising	✓	✓	✓	P	✓
Agriculture Business/Agribusiness Operations	✓	✓	✓	✓	✓
Animal Sciences, General (Animal Science Research and Meat Science)	✓	✓	✓	✓	✓
Anthropology-Applied, Cultural, Physical	✓	✓	✓	✓	✓
Applied Arts & Sciences; Classical Studies	✓	✓	✓	✓	NA
Architecture	✓	✓	✓	✓	NA
Architecture, Interior	✓	✓	✓	✓	NA
Art, General (Visual)/Fine-Studio Arts	✓	✓	✓	✓	✓
Audiology/Speech Path & Audiology; Communication Disorders	✓	✓	✓	✓	✓
Biological & Physical Sciences; Marine Science	✓	✓	P	✓	✓
Biology, General and Applied	✓	✓	✓	✓	✓
Business Adm & Mgmt/Bus, Gen/Bus Mngmt	✓	✓	✓	✓	✓
Business Marketing & Marketing Management	✓	✓	✓	✓	✓
Business, Accounting	✓	✓	✓	✓	✓
Business, Finance	✓	✓	✓	✓	✓
Business, Hotel/Motel & Restrnt Mngmnt/Hsptlty Mngmt; Hospitality Admn/Mgmt & Travel Tourism Mngmt	✓	✓	✓	✓	P
Business, Mngmnt Info Sys & Bus Data Processing, Gen	✓	✓	✓	✓	✓
Chemistry, General	✓	✓	✓	✓	✓
Communications, General	✓	✓	✓	✓	✓
Computer & Information Sciences, General	✓	✓	✓	✓	✓
Construction/Building Technology/Technician	✓	✓	✓	NA	NA
Criminal Justice; Criminal Justice/Law Enforcement Admn	✓	✓	✓	✓	✓
Drama/Theater Arts, General; Drama Production; Children's Theatre	✓	✓	✓	✓	✓
Economics, General; Bus/Managerial Econ	✓	✓	✓	✓	✓
Engineering, Chemical	✓	✓	P	✓	P
Engineering, Civil	✓	✓	✓	✓	✓
Engineering, Computer; Design & Implementation of Complex Comp Sys; Networks/Data Communic	✓	✓	✓	✓	✓
Engineering, Electrical, Electronics & Communication; Control Eng; Microelectronic Eng	✓	✓	✓	✓	✓
Engineering, Mechanical	✓	✓	✓	✓	✓
English Language & Literature, General	✓	✓	✓	✓	✓
Environmental Science & Studies	✓	✓	✓	✓	✓
Fitness & Sports	✓	✓	✓	✓	✓
General Studies	P	✓	✓	✓	NA
Health Studies; Community Health Liaison; Clinical Gerontology; Health Professions	✓	✓	✓	✓	✓
History, General, Atlantic, & US/Mexican History	✓	✓	✓	✓	✓
Individual & Family Development Studies, General	✓	✓	✓	✓	NA

Baccalaureate High-Demand Program Offerings
Five Largest and/or High-Growth Regions

(Refer to the table on page 10 for total programs by region)

(✓ = program present, P = planning authority granted;
I = program offered by independent institution; NA = program not offered in region)

Title	Central	Gulf Coast	Metroplex	South TX	Upper Rio Grande
Industrial Sales	✓	✓	✓	P	P
Interdisciplinary Studies, General; Future Studies & Other titles	✓	✓	✓	✓	✓
Journalism; Ag Journalism, Photojournalism, Science & Technology Journalism	✓	✓	✓	✓	✓
Liberal Arts & Sciences/Liberal Studies	✓	✓	✓	✓	NA
Mathematics	✓	✓	✓	✓	✓
Microbiology and/or Bacteriology	✓	✓	✓	P	✓
Music, General, Music History & Lit, Music History, Music Lit, specific instruments (performance)	✓	✓	✓	✓	✓
Nursing, General	✓	✓	✓	✓	✓
Occupational Therapy	P	✓	✓	✓	✓
Operations Research	✓	P	✓	P	P
Political Science & Government, General, Comparative Politics, Political Theory	✓	✓	✓	✓	✓
Psychology, General	✓	✓	✓	✓	✓
Public Relations & Organizational Communications	✓	✓	✓	✓	✓
Radio & Television Broadcasting	✓	✓	✓	P	P
Social Work, Education & Youth Service Agency	✓	✓	✓	✓	✓
Sociology, Rural Sociology, Applied Sociology	✓	✓	✓	✓	✓
Spanish Language & Literature	✓	✓	✓	✓	✓
Speech & Rhetorical Studies, Speech Communication	✓	✓	✓	✓	✓
Region Total	✓=52	✓=53	✓=52	✓=48	✓=42
Region Total	P=2	P=1	P=2	P=5	P=5
Region Total	NA=0	NA=0	NA=0	NA=1	NA=7
Region Total	I=0	I=0	I=0	I=0	I=0

Some high demand degrees were combined as shown.

Some institutions offer specialized programs which are not considered high-demand but do contribute to the region's baccalaureate-level offerings.

Master's High-Demand Program Offerings
Five Largest and/or High-Growth Regions

(Refer to the table on page 10 for total programs by region)

(✓ = program present, P = planning authority granted;
I = program offered by independent institution; NA = program not offered in region)

Title	Central	Gulf Coast	Metroplex	South TX	Upper Rio Grande
Agriculture/Agriculture Sciences	✓	✓	✓	✓	P
Anthropology: General, Applied, Cultural, and Physical	✓	✓	✓	✓	P
Architecture	✓	✓	✓	✓	NA
Audiology/Speech Pathology & Audiology	✓	✓	✓	✓	✓
Biology, General and Applied	✓	✓	✓	✓	✓
Business Administration & Management, General Bus	✓	✓	✓	✓	✓
Business Marketing & Marketing Management	✓	✓	✓	P	P
Business, Accounting	✓	✓	✓	✓	✓
Business, Finance	✓	✓	✓	✓	P
Business, Human Resources; Human Resource Dev, Personnel Management	✓	✓	✓	✓	P
Business, International	P	✓	✓	✓	✓
Business, Mngmnt Info Sys & Bus Data Prcssng, Gen	✓	✓	✓	✓	P
Business, Petro Land Mngmnt /Electronic Commerce/ Environmental Mngmnt, Business/Technology Commercialization & Management	✓	✓	✓	✓	P
Chemistry, General	✓	✓	✓	✓	✓
Community Health Sciences, Community Health Liaison, Public Health	✓	✓	✓	NA	P
Computer & Information Sciences, General; Information Science and Systems; Software Engineering	✓	✓	✓	✓	✓
Criminal Justice Studies; Criminal Justice/Law Enforcement Administration	✓	✓	✓	✓	✓
Drama/Theater Arts, General; Drama Production, Children's Theatre	✓	✓	✓	✓	✓
Economics, General and Bus/Managerial Economics	✓	✓	✓	✓	✓
Education, Agricultural	✓	✓	✓	P	P
Education, Curriculum & Instruction; Correctional Ed	✓	✓	✓	✓	✓
Education, Elmntry Ed/Early Childhood/Secondary Ed	✓	✓	✓	✓	✓
Education, Fitness & Sports/PE/Health Studies	✓	✓	✓	✓	✓
Education, General	P	P	✓	P	✓
Education, Instructional Technology (& Media Design)	✓	✓	✓	✓	P
Education, Occupation; Trade & Industrial Teacher Ed	✓	✓	✓	✓	P
Education, Reading Specialist	✓	✓	✓	✓	✓
Education, School Administration/Educational Leadership/Admin & Superintdncy and Other Titles	✓	✓	✓	✓	✓
Education, Special Education & Educational Diagnostician	✓	✓	✓	✓	✓
Engineering, Chemical	✓	✓	P	✓	P
Engineering, Civil	✓	✓	✓	✓	✓
Engineering, Computer; Electrical; Control Engineering	✓	✓	✓	✓	✓
Engineering, General	✓	✓	P	P	✓
Engineering, Industrial/Manufacturing; Industrial Safety Engineering; Manufacturing Engineering	✓	✓	✓	✓	✓
Engineering, Mechanical	✓	✓	✓	✓	✓

Master's High-Demand Program Offerings
Five Largest and/or High-Growth Regions

(Refer to the table on page 10 for total programs by region)

(✓ = program present, P = planning authority granted;
I = program offered by independent institution; NA = program not offered in region)

Title	Central	Gulf Coast	Metroplex	South TX	Upper Rio Grande
Engineering, Petroleum and Gas Engineering	✓	✓	P	✓	P
English Language & Literature, General	✓	✓	✓	✓	✓
Environmental Science and Studies	✓	✓	✓	✓	P
Geology and Marine Geology	✓	✓	✓	✓	✓
Guidance & Counseling/Counselor Ed/Counseling and Other Counseling-related Titles	✓	✓	✓	✓	✓
History: General, Atlantic, US/Mexican History	✓	✓	✓	✓	✓
Interdisciplinary Studies, General; Future Studies; and Other Titles	✓	✓	✓	✓	✓
Library Science/Librarianship and Learning Resources	✓	✓	✓	I	P
Mathematics	✓	✓	✓	✓	✓
Microbiology and/or Bacteriology	✓	✓	✓	✓	P
Music, General/Music-Performance; Music History & Lit; Music History; Music Lit; specific instrument performance	✓	✓	✓	✓	✓
Nursing, Fam Practice/Nrs Practitnr/Practitnr Major	✓	✓	✓	✓	✓
Nursing, General; Nursing Admin; Nursing Anesthetist; Nursing Midwifery; Nursing, Public Health; Practical Nursing; Clinical Specialist; Nursing Education	✓	✓	✓	✓	✓
Occupational Therapy	NA	P	✓	✓	NA
Physical Therapy	✓	✓	✓	✓	✓
Physics	✓	✓	✓	P	✓
Political Science & Government, General; Comparative Politics; Political Theory	✓	✓	✓	✓	✓
Psychology, Clinical /Counseling	✓	✓	✓	✓	✓
Psychology, Educational	✓	✓	✓	P	✓
Psychology, General	✓	✓	✓	✓	✓
Public Administration/Public Affairs; Emergency Management; Social Services Admin; Public Policy Analysis	✓	✓	✓	✓	✓
Social Work and Education and Youth Service Agency	✓	✓	✓	✓	P
Sociology, Rural Sociology, Applied Sociology	✓	✓	✓	✓	✓
Region Total	✓=55	✓=56	✓=55	✓=50	✓=39
Region Total	P=2	P=2	P=3	P=6	P=17
Region Total	NA=1	NA=0	NA=0	NA=1	NA=2
Region Total	I=0	I=0	I=0	I=1	I=0

Some high demand degrees were combined as shown.

Some institutions offer specialized programs which are not considered high-demand but do contribute to the region's master'sl-level offerings.

Doctoral High-Demand Program Offerings
Five Largest and/or High-Growth Regions

(Refer to the table on page 10 for total programs by region)

(✓ = program present, P = planning authority granted;
I = program offered by independent institution; NA = program not offered in region)

Title	Central TX	Gulf Coast	Metroplex	South TX	Upper Rio Grande
Biology, General and Applied	✓	✓	✓	NA	NA
Chemistry	✓	✓	✓	NA	NA
Computer & Information Sciences; Information Science and Systems; Software Engineering	✓	✓	✓	✓	P
Education, Curriculum & Instruction; Correctional Education	✓	✓	✓	NA	NA
Education, School Admin/Leadership	✓	✓	✓	✓	✓
Engineering, Chemical	✓	✓	P	NA	NA
Engineering, Civil	✓	✓	✓	NA	NA
Engineering, Electrical	✓	✓	✓	✓	NA
Engineering, Mechanical	✓	✓	✓	NA	NA
English Language & Literature, General	✓	✓	✓	✓	NA
History: General, Atlantic, and US/Mexican	✓	✓	✓	NA	✓
Molecular and/or Cell Biology; Cancer Biology	✓	✓	✓	✓	NA
Music: General/Performance and Specific Instruments	✓	✓	✓	NA	NA
Nursing, General	✓	✓	✓	✓	NA
Physics	✓	✓	✓	NA	NA
Psychology, Counseling & Clinical	✓	✓	✓	P	NA
Psychology, Educational	✓	✓	✓	P	NA
Sociology, Rural Sociology, Applied Sociology	✓	P	✓	NA	NA
Region Total	✓=18	✓=17	✓=17	✓=6	✓=2
Region Total	P=0	P=1	P=1	P=2	P=1
Region Total	NA=0	NA=0	NA=0	NA=10	NA=15
Region Total	I=0	I=0	I=0	I=0	I=0

Some high demand degrees were combined as shown.

Some institutions offer specialized programs which are not considered high-demand but do contribute to the region's doctoral-level offerings. For example, The University of Texas at El Paso in the Upper Rio Grande region offers doctorates in pathobiology, environmental engineering, and community psychology.

The previous three tables provide a summary of high-demand degrees available in the high growth regions of the state. The next two tables summarize the availability of high-demand programs in the low growth regions. The five regions (High Plains, Northwest Texas, Southeast Texas, Upper East Texas, and West Texas) are not expected to experience the high population growth of the other five regions, but their important role in higher education is demonstrated by the extent to which each region provides key higher education services.

Baccalaureate High-Demand Program Offerings
Five Low-Growth Regions

(Refer to the table on page 10 for total programs by region)

(✓ = program present, P = planning authority granted;
I = program offered by independent institution; NA = program not offered in region)

Title	High Plains	Northwest	Southeast	Upper East	West
Advertising	✓	P	✓	NA	NA
Agriculture Business/Agribusiness Operations	✓	I	✓	NA	NA
Animal Sciences, General (Animal Science Research and Meat Science)	✓	I	✓	NA	✓
Anthropology-Applied, Cultural, Physical	✓	P	P	P	✓
Applied Arts & Sciences; Classical Studies	✓	✓	✓	✓	NA
Architecture	✓	NA	NA	NA	NA
Architecture, Interior	✓	NA	✓	NA	NA
Art, General (Visual)/Fine-Studio Arts	✓	✓	✓	✓	✓
Audiology/Speech Path & Audiology; Communication Disorders	✓	I	✓	NA	NA
Biological & Physical Sciences; Marine Science	✓	I	P	NA	✓
Biology, General and Applied	✓	✓	✓	✓	✓
Business Adm & Mgmt/Bus, Gen/Bus Mngmt	✓	✓	✓	✓	✓
Business Marketing & Marketing Management	✓	✓	✓	✓	✓
Business, Accounting	✓	✓	✓	✓	✓
Business, Finance	✓	✓	✓	✓	✓
Business, Hotel/Motel & Restrnt Mngmnt/Hsptlty Mngmt; Hospitality Admn/Mgmt & Travel Tourism Mngmt	✓	P	✓	P	P
Business, Mngmnt Info Sys & Bus Data Processing, Gen	✓	✓	✓	✓	✓
Chemistry, General	✓	✓	✓	✓	✓
Communications, General	P	P	✓	I	✓
Computer & Information Sciences, General	✓	✓	✓	✓	✓
Construction/Building Technology/Technician	P	NA	P	NA	NA
Criminal Justice; Criminal Justice/Law Enforcement Admn	✓	✓	✓	✓	✓
Drama/Theater Arts, General; Drama Production; Children's Theatre	✓	✓	✓	✓	✓
Economics, General; Bus/Managerial Economics	✓	✓	✓	✓	✓
Engineering, Chemical	✓	NA	✓	NA	NA
Engineering, Civil	✓	NA	✓	NA	NA
Engineering, Computer; Design & Implementation of Complex Comp Systems; Networks/Data Communication	✓	NA	P	I	NA
Engineering, Electrical, Electronics & Communication; Control Eng; Microelectronic Eng	✓	I	✓	✓	✓
Engineering, Mechanical	✓	NA	✓	✓	NA
English Language & Literature, General	✓	✓	✓	✓	✓
Environmental Science & Studies	✓	✓	✓	NA	✓
Fitness & Sports	✓	✓	✓	✓	✓
General Studies	✓	I	✓	✓	✓
Health Studies; Community Health Liaison; Clinical Gerontology; Health Professions	✓	NA	✓	✓	P

Baccalaureate High-Demand Program Offerings
Five Low-Growth Regions

(Refer to the table on page 10 for total programs by region)

(✓ = program present, P = planning authority granted;
I = program offered by independent institution; NA = program not offered in region)

Title	High Plains	Northwest	Southeast	Upper East	West
History, General, Atlantic, & US/Mexican History	✓	✓	✓	✓	✓
Individual & Family Development Studies, General	✓	I	✓	NA	✓
Industrial Sales	P	P	P	✓	NA
Interdisciplinary Studies, General; Future Studies & Other Titles	✓	✓	✓	✓	✓
Journalism; Ag Journalism, Photojournalism, Science & Technology Journalism	✓	✓	✓	✓	✓
Liberal Arts & Sciences/Liberal Studies	✓	I	NA	NA	✓
Mathematics	✓	✓	✓	✓	✓
Microbiology and/or Bacteriology	✓	P	P	P	P
Music, General, Music History & Lit, Music History, Music Lit, specific instruments (performance)	✓	✓	✓	✓	✓
Nursing, General	✓	✓	✓	✓	✓
Occupational Therapy	✓	NA	NA	NA	NA
Operations Research	P	P	P	P	P
Political Science & Government, General, Comparative Politics, Political Theory	✓	✓	✓	✓	✓
Psychology, General	✓	✓	✓	✓	✓
Public Relations & Organizational Communications	✓	P	P	NA	NA
Radio & Television Broadcasting	✓	P	✓	NA	NA
Social Work, Education & Youth Service Agency	✓	✓	✓	I	NA
Sociology, Rural Sociology, Applied Sociology	✓	✓	✓	✓	✓
Spanish Language & Literature	✓	✓	✓	✓	✓
Speech & Rhetorical Studies, Speech Communication	✓	P	✓	✓	✓
Region Total	✓=50	✓=27	✓=43	✓=31	✓=34
Region Total	P=4	P=10	P=8	P=4	P=4
Region Total	NA=0	NA=9	NA=3	NA=16	NA=16
Region Total	I=0	I=8	I=0	I=3	I=0

Some high demand degrees were combined as shown.

Some institutions offer specialized programs which are not considered high-demand but do contribute to the region's baccalaureate-level offerings.

Master's High-Demand Program Offerings
Five Low-Growth Regions

(Refer to the table on page 10 for total programs by region)

(✓ = program present, P = planning authority granted;
I = program offered by independent institution; NA = program not offered in region)

Title	High Plains	Northwest	Southeast	Upper East	West
Agriculture/Agriculture Sciences	✓	NA	✓	NA	NA
Anthropology: General, Applied, Cultural, and Physical	✓	P	P	NA	NA
Architecture	✓	NA	NA	NA	NA
Audiology/Speech Pathology & Audiology	✓	NA	✓	NA	NA
Biology, General and Applied	✓	✓	✓	✓	✓
Business Administration & Management, General Bus	✓	✓	✓	✓	✓
Business Marketing & Marketing Management	✓	P	P	P	P
Business, Accounting	✓	P	✓	✓	✓
Business, Finance	✓	P	P	P	P
Business, Human Resources; Human Resource Dev, Personnel Management	P	✓	P	P	P
Business, International	✓	P	P	P	P
Business, Management Information Systems & Business Data Processing, Geneneral	✓	P	P	P	P
Business, Petro Land Mngmnt /Electronic Commerce/ Environmental Mngmnt, Business/Technology Commercialization & Management	P	P	P	P	P
Chemistry, General	✓	P	✓	P	NA
Community Health Sciences, Community Health Liaison, Public Health	NA	NA	NA	NA	NA
Computer & Information Sciences, General; Information Science and Systems; Software Engineering	✓	✓	✓	✓	P
Criminal Justice Studies; Criminal Justice/Law Enforcement Administration	✓	P	✓	✓	✓
Drama/Theater Arts, General; Drama Production, Children's Theatre	✓	NA	✓	NA	NA
Economics, General and Bus/Managerial Economics	✓	P	P	P	P
Education, Agricultural	✓	P	P	P	P
Education, Curriculum & Instruction; Correctional Ed	✓	✓	P	✓	✓
Education, Elmntry Ed/Early Childhood/Secondary Ed	✓	✓	✓	✓	✓
Education, Fitness & Sports/PE/Health Studies	✓	✓	✓	✓	✓
Education, General	✓	P	P	P	P
Education, Instructional Technology (& Media Design)	✓	P	P	✓	✓
Education, Occupation; Trade & Industrial Teacher Ed	P	P	P	P	P
Education, Reading Specialist	✓	✓	✓	✓	✓
Education, School Administration/Educational Leadership/Admin & Superintdncy and Other Titles	✓	✓	✓	✓	✓
Education, Special Education & Educational Diagnostician	✓	✓	✓	✓	✓
Engineering, Chemical	✓	NA	P	NA	NA
Engineering, Civil	✓	NA	P	NA	NA
Engineering, Computer; Electrical; Control Engineering	✓	NA	P	NA	✓
Engineering, General	✓	NA	✓	✓	NA
Engineering, Industrial/Manufacturing; Industrial Safety Engineering; Manufacturing Engineering	✓	NA	P	NA	NA
Engineering, Mechanical	✓	NA	P	NA	NA

Master's High-Demand Program Offerings
Five Low-Growth Regions

(Refer to the table on page 10 for total programs by region)

(✓ = program present, P = planning authority granted;
I = program offered by independent institution; NA = program not offered in region)

Title	High Plains	Northwest	Southeast	Upper East	West
Engineering, Petroleum and Gas Engineering	✓	NA	P	NA	NA
English Language & Literature, General	✓	✓	✓	✓	✓
Environmental Science and Studies	✓	NA	✓	NA	P
Geology and Marine Geology	P	P	✓	NA	✓
Guidance & Counseling/Counselor Ed/Counseling and other Counseling-related Titles	✓	✓	P	P	✓
History: General, Atlantic, US/Mexican History	✓	✓	✓	✓	✓
Interdisciplinary Studies, General; Future Studies; and other titles	✓	P	✓	✓	✓
Library Science/Librarianship and Learning Resources	NA	NA	NA	NA	NA
Mathematics	✓	P	✓	✓	P
Microbiology and/or Bacteriology	✓	P	P	NA	P
Music, General/Music-Performance; Music History & Lit; Music History; Music Lit; specific instrument performance	✓	I	✓	NA	NA
Nursing, Family Practice/Nurse Practitioner/Practitioner Major	✓	✓	NA	P	P
Nursing, General; Nursing Admin; Nursing Anesthetist; Nursing Midwifery; Nursing, Public Health; Practical Nursing; Clinical Specialist; Nursing Education	✓	✓	✓	✓	✓
Occupational Therapy	✓	NA	NA	NA	NA
Physical Therapy	✓	NA	NA	NA	✓
Physics	✓	NA	✓	NA	NA
Political Science & Government, General; Comparative Politics; Political Theory	✓	✓	✓	✓	NA
Psychology, Clinical /Counseling	✓	✓	✓	✓	✓
Psychology, Educational	✓	P	P	✓	P
Psychology, General	✓	✓	✓	P	✓
Public Administration/Public Affairs; Emergency Mngmt; Social Services Admin; Public Policy Analysis	✓	✓	✓	✓	✓
Social Work and Education and Youth Service Agency	P	P	✓	NA	NA
Sociology, Rural Sociology, Applied Sociology	✓	P	P	✓	NA
Region Total	✓=51	✓=19	✓=29	✓=23	✓=22
Region Total	P=5	P=21	P=23	P=14	P=16
Region Total	NA=2	NA=17	NA=6	NA=21	NA=20
Region Total	I=0	I=1	I=0	I=0	I=0

Some high demand degrees were combined as shown.

Some institutions offer specialized programs which are not considered high-demand but do contribute to the region's master's-level offerings.

The low-growth regions appear to provide high-demand baccalaureate and masters degree programs at levels which satisfy the educational demand and needs of the regions. Doctoral degrees, which tend to be specialized and more in demand in highly populated areas, are provided below for comparative purposes. The table below is not intended to encourage, or discourage, institutions within the low-growth regions to fulfill the educational needs of their region.

Doctoral High-Demand Program Offerings
Five Low-Growth Regions

(Refer to the table on page 10 for total programs by region)

(✓ = program present, P = planning authority granted;
I = program offered by independent institution; NA = program not offered in region)

CIP Title	High Plains	Northwest	Southeast	Upper East	West
Biology, General and Applied	✓	NA	NA	NA	NA
Chemistry	✓	NA	NA	NA	NA
Computer & Information Sciences; Information Science and Systems; Software Engineering	✓	NA	NA	NA	NA
Education, Curriculum & Instruction; Correctional Education	✓	NA	NA	NA	NA
Education, School Admin/Leadership	✓	NA	✓	NA	NA
Engineering, Chemical	✓	NA	P	NA	NA
Engineering, Civil	✓	NA	P	NA	NA
Engineering, Electrical	✓	NA	P	NA	NA
Engineering, Mechanical	✓	NA	P	NA	NA
English Language & Literature, General	✓	NA	NA	NA	NA
History: General, Atlantic, and US/Mexican	✓	NA	NA	NA	NA
Molecular and/or Cell Biology; Cancer Biology	P	NA	NA	NA	NA
Music: General/Performance and Specific Instruments	✓	NA	NA	NA	NA
Nursing, General	✓	NA	NA	NA	NA
Physics	✓	NA	NA	NA	NA
Psychology, Counseling & Clinical	✓	NA	NA	NA	NA
Psychology, Educational	✓	NA	NA	NA	NA
Sociology, Rural Sociology, Applied Sociology	P	NA	NA	NA	NA
Region Total	✓=16	✓=0	✓=1	✓=0	✓=0
Region Total	P=2	P=0	P=4	P=0	P=0
Region Total	NA=0	NA=18	NA=13	NA=18	NA=18
Region Total	I=0	I=0	I=0	I=0	I=0

Some high demand degrees were combined as shown.

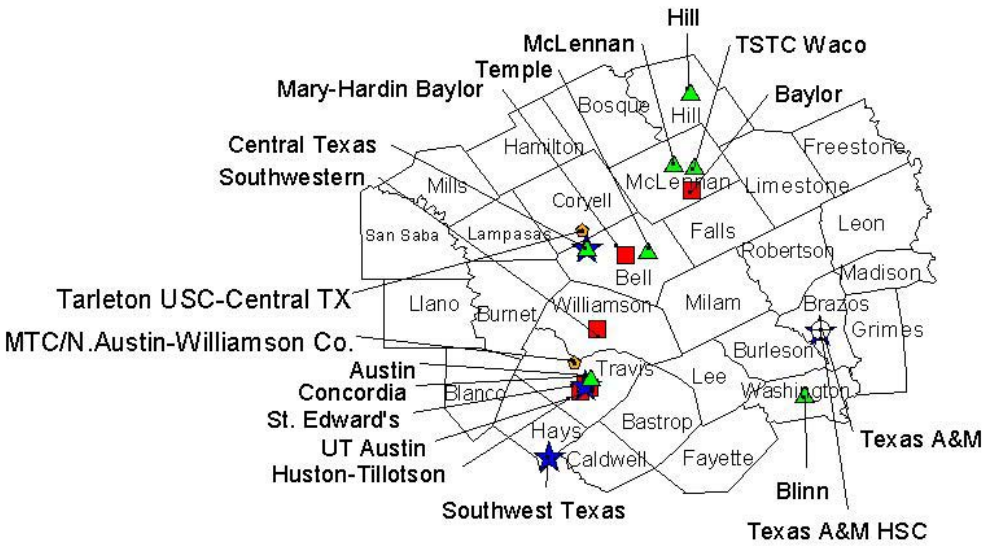
Some institutions offer specialized programs which are not considered high-demand but do contribute to the region's doctoral-level offerings.

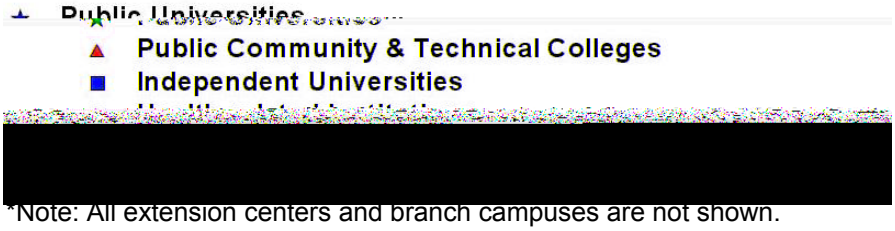
Regions

The following section provides a synopsis of each region of the state, beginning with the five fastest growing (high-growth) regions and ending with the low-growth regions. Each regional synopsis includes a map of the region identifying institutions located within the region, and highlights the regions' demographic, enrollment, educational opportunities, and employment areas (as provided by the State Comptroller's Office). The summary at the end of each region's section provides additional insight into the relationship of higher education within the region.

Future reports may review each region's unique service missions or challenges, such as the costs and benefits of educating non-resident students. Additional opportunities for study include the extent of partnerships among institutions within or beyond regional boundaries. Appendix D highlights research and development expenditures by region, with additional research expenditure information provided at http://www.thecb.state.tx.us/ResearchExpenditures/. A list of institutions by region, with corresponding abbreviations used with the maps in this section, is provided in Appendix E.

Central Texas





*Note: All extension centers and branch campuses are not shown.
Updated maps including these sites will be available in spring 2003.

Demographics

- The population of the Central Texas region is projected to increase from approximately 2,309,972 people in 2000 to 2,962,962 people in 2015 (22 percent growth).
- As a percentage, the population increase for the 15-to-34 age is much lower, with an increase projected from 795,352 people in 2000 to 888,357 people by 2015 (11 percent growth).
- The racial/ethnic mix of the 15-to-34 population in the Central Texas Region is currently 59 percent White, 11 percent Black, and 25 percent Hispanic. The mix is projected to change to 53 percent White, 12 percent Black, and 31 percent Hispanic by 2015.
- The number of residents age 25 and older with a high school degree (or GED) or higher is 82.1 percent, with an associate degree or higher, 35.2 percent; with a baccalaureate or higher, 29.6 percent. The region ranks first in the state in all three categories.

Enrollment

- Participation in higher education from regional residents (3.7 percent) is slightly lower than the state average (3.9 percent), with 26,449 of 38,095 university/health-related students (69.4 percent) remaining in the region. Of the 47,507 two-year college students from the region, 45,624 students (96 percent) remain in the region.

- In fall 2001, Texas residents accounted for 102,554 (86.4%) of the enrollment at universities (non-resident students from other states or other countries accounted for 13.6 percent of the total university enrollment).
- Fall 2001 minority enrollment in the region is very low. Only 13 percent of the enrollment is Hispanic, compared to 25 percent statewide. Black enrollment was only 6 percent regionally, compared to 11 percent statewide.
- The two largest institutions in the state are located in the Central Texas region and have statewide educational missions: Texas A&M University and The University of Texas at Austin. Both institutions have self-imposed enrollment caps that will affect regional enrollment growth targets. Enrollment at these institutions has a major impact on enrollment growth not only within the region, but also statewide.
- Targeted enrollment growth for the regions is relatively low—an increase of 25,600 students. Eighty-eight percent of the growth is targeted at the community college level.
    - Universities in Central Texas currently have a space deficit of over 1 million square feet. With the expected growth, that deficit is expected to grow to 1.2 million square feet.
    - Additional faculty will also be needed to maintain the current ratio. Universities in the region will need to add 210 faculty members, and community colleges will need 1,171 more faculty members.

Educational Opportunities

- The Central Texas Region has three public universities, seven public two-year college districts, six independent colleges, one public or independent health science center, two MITC/USCs, for a total of 19 higher education institutions.
- The Central Texas region has the most comprehensive program array of any region in the state, primarily because it is home to both The University of Texas at Austin and Texas A&M University.
- The one program area that should be reviewed for need is occupational therapy at the bachelor's and master's levels.

Employment

All data included in this section is from the Texas Comptroller of Public Accounts (Comptroller's) Texas Regional Outlook Reports, released August and September 2002. The Central Texas region is a combination of the Comptroller's Capital and Central regions.

- Overall, the Capital and Central regions are expected to grow slower than in recent years, and slightly slower than in the state as a whole.
- As has been seen in the recent past, health care and computer services will prove a strong job generator in the Central Texas region during the next few years. This should include a broad range of health care professions and nursing services.
- This region (Capital) tends to be very competitive in industries that are growing well in Texas and throughout the United States. The fastest growing occupations for one or both regions include: computer scientists, health care diagnosticians, life scientists, several categories of health care technical workers, teachers, librarians and counselors, physical and social scientists, numerical control machine operators, health assessment and treatment workers, information clerks, lawyers and other professional workers.

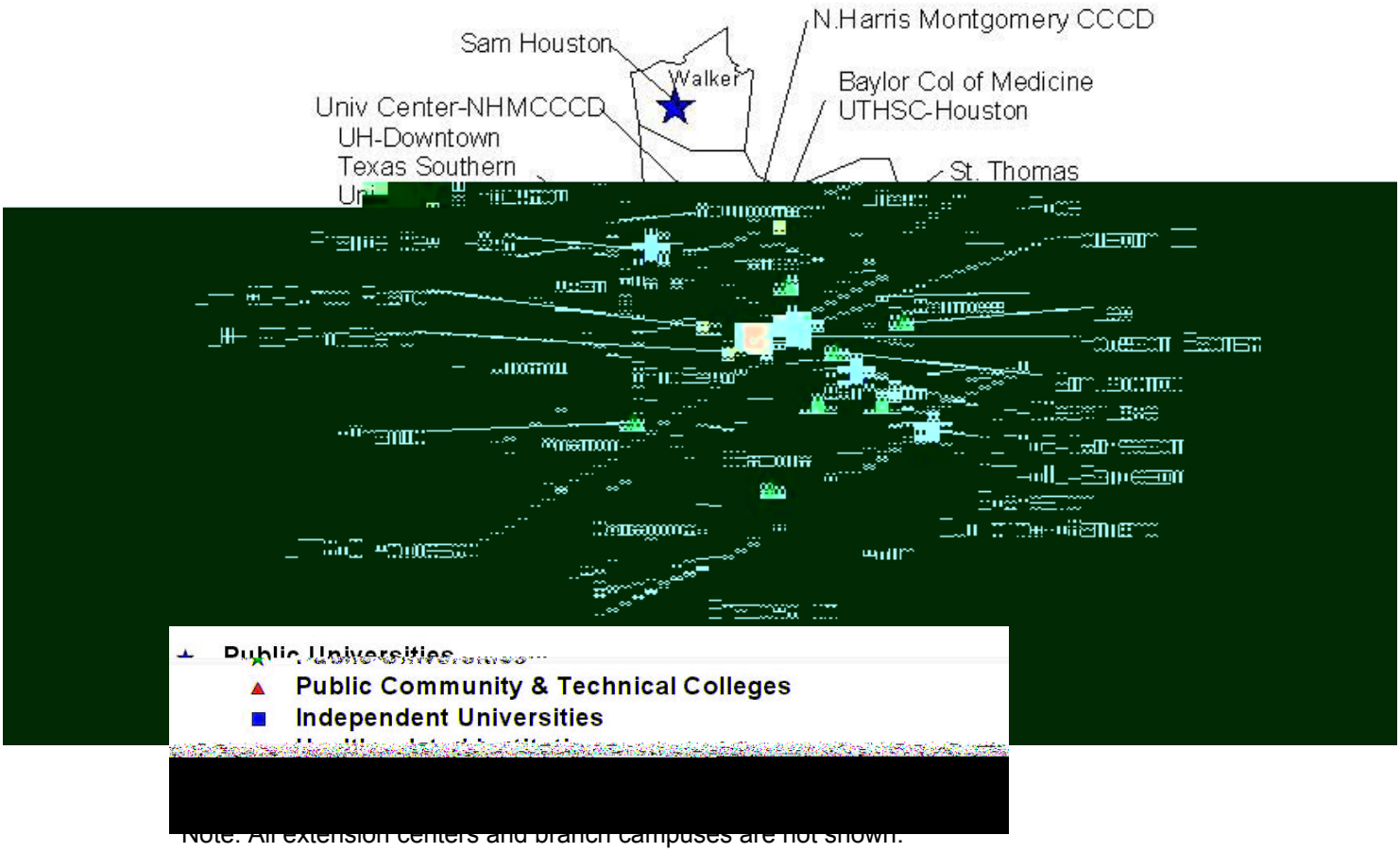
- The region offers degree opportunities to support the job growth.

Regional Summary

Given the size and scope of the three public universities in the region, there are a wide variety of programs from the bachelors to professional level offered within the region. However, because of the statewide mission and enrollment caps at The University of Texas at Austin and Texas A&M University, and the fast growth of Southwest Texas State University, attention should focus on the Round Rock Higher Education Center and the Tarleton State University-Central Texas in Killeen to accommodate regional increases in enrollments. Additional opportunities at the baccalaureate and master's level may be needed to serve students who are unable to travel for their education or unable to gain admission to the enrollment-capped universities in the region. Additionally, Southwest Texas State University may expand its range of programs within and beyond the main campus to enroll students from the Austin and San Antonio areas. There are also opportunities at the local community and technical colleges for students to receive academic, technical, and adult basic education.

The high educational attainment of the region's population encourages economic development. In turn, the economic development provides partnership opportunities for the institutions.

Gulf Coast



Note: All extension centers and branch campuses are not shown.
Updated maps including these sites will be available in spring 2003.

Demographics

- The population of the Gulf Coast region is projected to increase by approximately 1.2 million people (21 percent growth) to 6.1 million people by 2015.
- The traditional 15-to-34 year-old college-age population is projected to increase by 16 percent in this region, from approximately 1.5 million people in 2000 to 1.75 million people by 2015. This is the second-largest numerical increase in this age group among the 10 regions, with only the South Texas region having a larger increase.
- The racial/ethnic mix of the age 15-to-34 population in the Gulf Coast region for 2000 was 41 percent White, 17 percent Black, and 36 percent Hispanic; projections for 2015 for the region are 34 percent White, 17 percent Black, and 44 percent Hispanic.
- The population in this region ranks third in the state regarding the number of adults (age 25 or older) with at least a high school diploma (76.2 percent), an associate degree or higher (31.1 percent), or a baccalaureate or higher (26.1 percent).

Enrollment

- Although the percentage of the population participating in higher education from this region is average, the number of students participating in higher education from this region is the largest in the state. There are 99,259 university students from the region with 60,715 students remaining in the region and 38,544 leaving the region for another Texas public university.
- In fall 2001, Texas residents accounted for 72,459 (91.0 percent) of the students at universities (non-resident students from other states or other countries accounted for 9 percent of the total university enrollment).
- The Gulf Coast region is home to more two-year college and university students than any other region.
- Several initiatives are in place to meet the increased demands for higher education in the region, including:
    - The University of Houston-Sugar Land (formerly the University of Houston-Fort Bend) and the University of Houston-Cinco Ranch (formerly the West Houston Institute) which offer programs from all University of Houston System institutions.
    - Courses continue to be provided at the North Houston Institute.
    - The University Center at North Harris-Montgomery County is a MITC in the Conroe area.
    - Construction is under way for the new North Harris Montgomery Community College District Cy-Fair College campus, which will begin offering classes in August 2003. In the meantime, classes are being offered in Fairbanks Center (a satellite location) and other facilities in the Cy-Fair area.
- If enrollment targets for the region are met, approximately 105,000 additional students will be enrolled in higher education in the region by 2015.
    - Projected university space needs through 2015 for this region indicate a 2.4 million square-foot deficit to accommodate an additional 23,800 students.
    - Through 2015, a projected 1,629 more faculty members will be needed at the university level, and 4,046 faculty at the two-year college level (the highest two-year college faculty needs in the state).

Educational Opportunities

- The Gulf Coast region has seven public universities, nine public two-year colleges, three independent colleges, four public or independent health science centers, and three MITC/USCs, for a total of 26 higher education institutions.
- There are very few high-demand programs that are not available in the Gulf Coast region. At the bachelors level, operations research is not currently offered.
- Agriculture/agriculture sciences and occupational therapy at the master's level are high-demand programs which are not available. (Planning authority has been given for occupational therapy at UTMB-Galveston.)
- Sociology is not offered at the doctoral level, but planning authority has been given the University of Houston and the University of Houston-Clear Lake.

Employment

All data included in this section is from the Texas Comptroller of Public Accounts (Comptroller's) Texas Regional Outlook Reports, released July 2002.

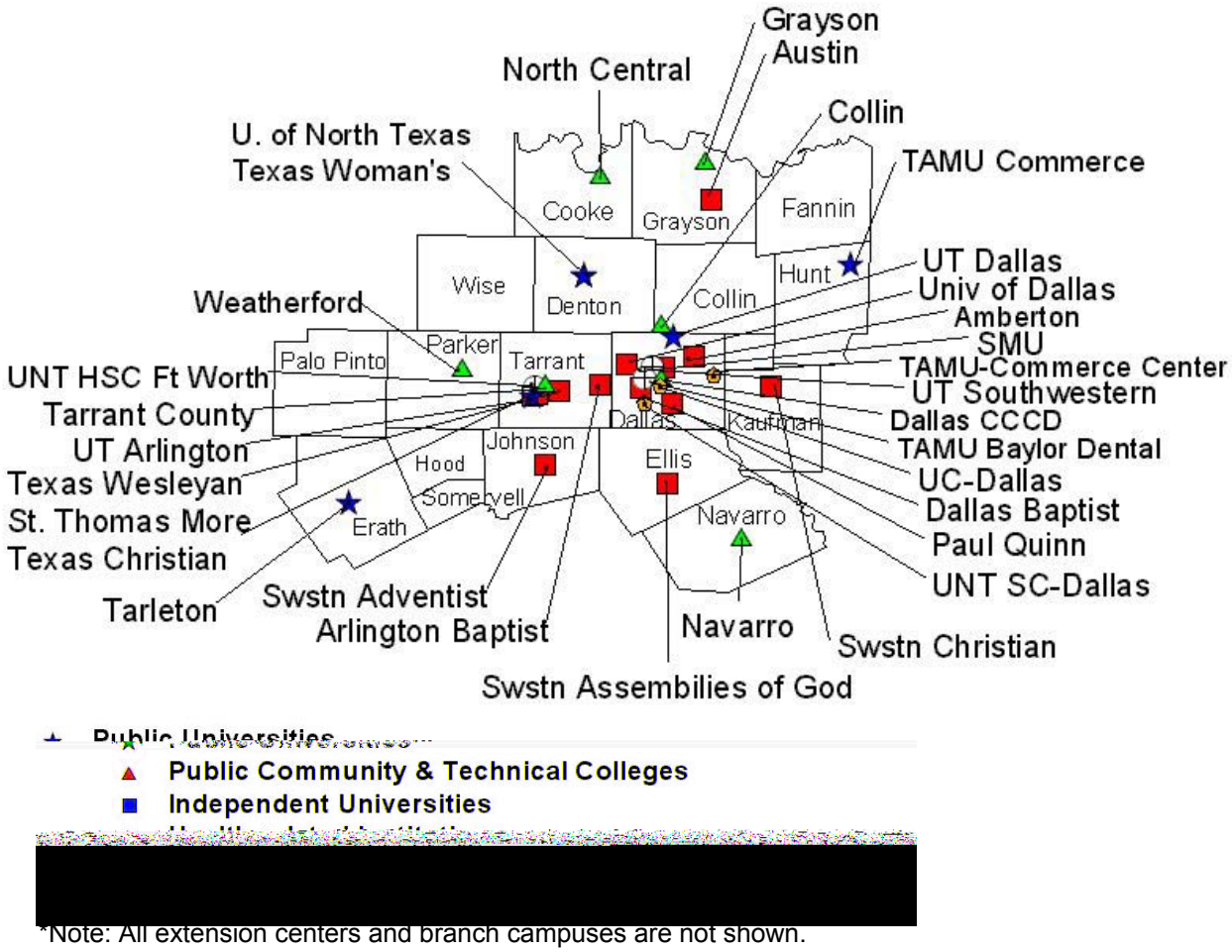
- Through 2005, employment in the region should grow at a 1.6 percent annual rate, the same rate forecast for Texas.
- Fueling strong growth will be services provided to business, including personnel supply services, management and public relations, building services and miscellaneous business services.
- Overall, the profile of industries in the Gulf Coast region is varied, showing a certain level of diversification in the local economy but still heavily slanted toward the oil and gas industry.
- Computer scientists, mathematicians and operations researchers represent the occupation field with the largest growth, followed by managerial and administrative, food preparation, clerical, protective services, and teachers. Many of these occupations rely on a well-trained, highly educated work force.
- The fastest growing occupations include computer scientists and health diagnosing workers, followed by health service workers, life scientists, health technicians and technologists, teachers, librarians, counselors, information clerks, numerical control machine operators, communication workers and other professional workers.

Regional Summary

The 77th Texas Legislature appropriated $50 million to strengthen both Prairie View A&M University (Prairie View) and Texas Southern University (TSU) by developing facilities and new programs. Many of the new programs are still in the development stages. The programs at Prairie View include a baccalaureate degree program in construction science; master's degree programs in electrical engineering, computer science, architecture and information systems; and doctoral degree programs in electrical engineering, education leadership and juvenile forensic psychology. The programs at TSU include a bachelor's degree program in computer engineering technology; master's degree programs in urban planning and environmental policy, health care administration, computer science, biomedical and pharmaceutical sciences, management information systems and administration of justice; and doctoral degree programs in urban planning and environmental policy and administration of justice.

The Gulf Coast already has established new access points with the addition of MITCs and USCs. With the large number of institutions in the region and the differences in student demand across institutions, there appears in the near term to be some potential for the shared use of facilities among the region's institutions. The community colleges in this region are targeting an increase of over 80,000 students and may need help providing facilities with or without implementing new methods of program delivery.

Metroplex



*Note: All extension centers and branch campuses are not shown.
Updated maps including these sites will be available in spring 2003.

Demographics

- The population of the Metroplex region is projected to increase by approximately 1.6 million people (23 percent) to 7.1 million people by 2015, making it the fastest growing region of the state. This increase is almost twice as high as the 13 percent projected increase in the age 15-to-34 age group.
- Of the 10 regions, the Metroplex has the largest 15-to-34 population and total population. It will remain the most populated region through 2015.
- Currently, the racial/ethnic mix of the age 15-to-34 population in the Metroplex region is 53 percent White, 14 percent Black, and 28 percent Hispanic. With approximately a 1,800-person increase in the White 15-to-34 population and almost a 193,300-person increase in the Hispanic 15-to-34 population, the racial/ethnic mix is projected change to 46 percent White, 15 percent Black, and 34 percent Hispanic by 2015.
- The Metroplex has the second highest educational attainment level, behind Central Texas, as represented by the percent of the population over 25 that has completed high school (79.8 percent); an associate's degree or higher (33.4 percent); or a baccalaureate degree or higher (27.8 percent).

- The region may be expanded to include students from the Oklahoma border area (Hugo and Durant) which would add a population that totaled 6,149 15-to-34 year olds in 2000.

Enrollment

- In fall 2001, 188,478 students from the region were enrolled in public higher education in the Metroplex. Community colleges enrolled 53.6 percent of the students; universities and health-related institutions, 46.4 percent.
- In fall 2001, Texas residents accounted for 74,024 (86.7 percent) of the students in universities. (non-residents from other states or other countries accounted for 13.3 percent of the total enrollment).
- Only 3.4 percent of people from the region participate in higher education—lower than the state average of 3.9 percent. Of the 87,500 students from the region enrolled in universities, 56,500 (64.6 percent) remain in the region. At the two-year college level, 94,200 of the 101,000 students remain in the Metroplex region (93.3 percent).
- If institutions in the region meet the enrollment targets they set for the *Closing the Gaps by 2015* plan, the region will have the largest enrollment growth of any region (114,000 students). If they achieve these targets:
    - Projected space needs through 2015 at the university level for this region indicate a 4.3 million square-foot deficit to accommodate an additional 50,626 students.
    - An additional increase of 3,150 faculty members will be needed at the university level, and 3,545 faculty at the two-year college level throughout this region by 2015.

Educational Opportunities

- The Metroplex region has six public universities, seven public two-year college districts, 12 independent colleges, two public health-related institutions, and three MITC/USCs, for a total of 30 higher education institutions – more than any other region.
- At the bachelor's, master's, and doctoral levels, the institutions in the region offer a broad range of programs. Institutions in the Metroplex currently offer or have planning authority for most of the high-demand programs.
- Programs not available in the Metroplex include biological and physical sciences and chemical engineering at the bachelor's level. At the master's level, the programs not offered include agriculture sciences, and chemical engineering, general engineering, and petroleum engineering. The only doctoral-level program not offered from the high-demand program list is chemical engineering.

Employment

All data included in this section is from the Texas Comptroller of Public Accounts (Comptroller's) Texas Regional Outlook Reports, released September 2002.

- The importance of future training and education is evident. It is led by the need for additional computer scientists, followed closely by health care diagnosticians, life scientists, health service workers, teachers, librarians and counselors, health

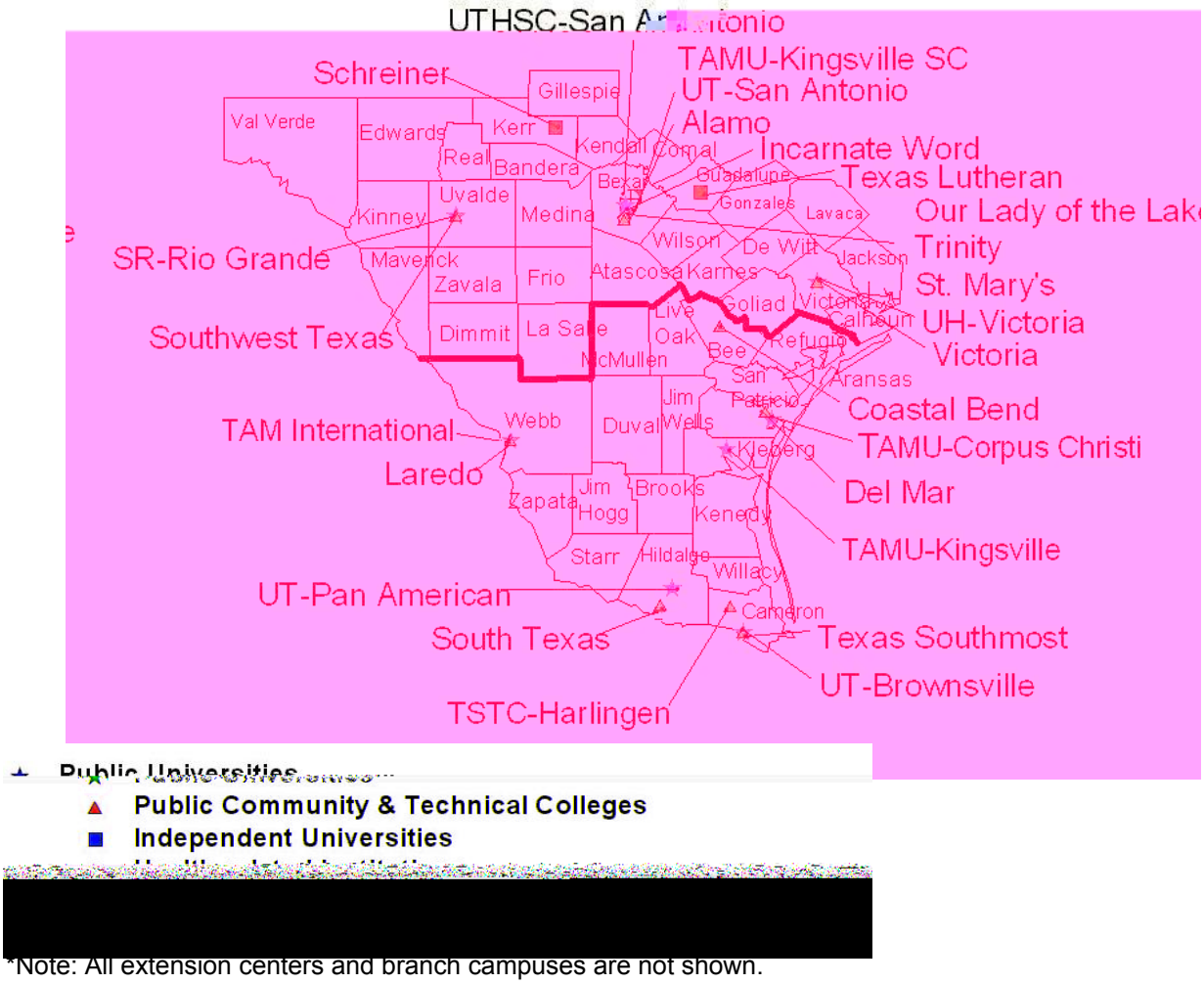
technicians and technologists, health assessment technicians, social scientists, and other professional workers.

- Of the top 25 occupations expected to grow the fastest during the next five years, 12 will require some advanced training beyond high school, and most of these will require either an associate's degree, a bachelor's degree, or other advanced degrees.

Regional Summary

Overall, the Metroplex is well-served by the volume of high-demand programs offered. Space is available at some of the existing universities. Additional access is afforded by the Downtown Center and the University of North Texas System Center at Dallas. Dallas County Community College reported dramatic enrollment increases from 2001 through 2002. As with community colleges in other regions, the community college district's current facilities may be inadequate to handle future enrollment increases. Multi-institutional partnerships have contributed, and will continue to contribute, to the educational opportunities within the region.

South Texas



*Note: All extension centers and branch campuses are not shown.
Updated maps including these sites will be available in spring 2003.

Demographics

- The population of South Texas is projected to increase by one million people (21 percent) to 4.9 million people by 2015.
- The South Texas region is projected to be the fastest growing region, as measured numerically, in the 15-to-34 year-old age group (increasing by 307,600 people to a 1.45 million population). In addition, this region is among the top three regions in total population growth.
- The 15-to-34 Hispanic population in the region will total almost 1.1 million by 2015.
- South Texas - South is the fastest growing area of the state, with an expected 36 percent growth. It comprises 55 percent the region's population.
- Educational attainment of the region's population is low. The percent of the population with at least a high school diploma is the second lowest in the state, at 68 percent, only above the Upper Rio Grande at 65.6 percent. If South Texas - South is considered separately, it has the lowest educational attainment level in the state – only 58.6 percent of the population has a high school diploma, GED, or above.

- The region may be expanded to include students from the Mexico border area (cities of Acuna, Nuevo Laredo, Matamoras, Piedras Negras, Reynosa, Rio Bravo), which would add a population that totaled 579,437 15-to-34 year olds in 2000.

Enrollment

- In fall 2001, there were 161,550 students from the region enrolled in public higher education in South Texas. Of those, 87,668 were enrolled at the public two-year level. Forty-eight percent of the enrollments were in South Texas - South.
- In fall 2001, Texas residents accounted for 53,991 (95.3 percent) of university enrollment (non-resident students from other states or other countries accounted for 4.7 percent of the total).
- Approximately 4.2 percent of the region's residents participate in higher education, higher than the public statewide participation level of 3.9 percent. There is a large variation in participation rates between South Texas - North (4.8 percent) and - South (3.6 percent), however.
- If institutions in the region meet the enrollment targets they set for the *Closing the Gaps by 2015* plan, the region will have the largest university enrollment growth of any region and more than the combined growth of seven of the other regions. Growth at the two-year college level would be the third largest among the regions If they achieve these targets:
    - Projected space needs through 2015 at the university level for this region indicate a 3.2 million square-foot deficit to accommodate an additional 56,950 students.
    - An additional 2,815 faculty members will be needed at the university level and 1,251 faculty members will be needed at the two-year college level by 2015.

Educational Opportunities

- The South Texas region has eight public universities, nine public two-year colleges, six independent colleges, one public health science center, and one MITC/USC, for a total of 25 higher education institutions. All of the major cities in the region have access to a college or university.
- South Texas has a large array of programs offered at the associate's and bachelor's level.
- At the bachelor's degree level, unavailable high-demand programs include advertising, construction/building technology, industrial sales, microbiology/bacteriology, operations research, and radio and television broadcasting.
- Master's-level high-demand programs not offered include business marketing and marketing management, agriculture education, educational psychology, general education, general engineering, library science, and physics.
- Very few of the high-demand doctoral programs are available in South Texas. Not available are biology, chemistry, curriculum and instruction, educational psychology, chemical, civil, and mechanical engineering, history, music, physics, clinical psychology, counseling psychology, and sociology degree programs.

Employment

All data included in this section is from the Texas Comptroller of Public Accounts (Comptroller's) Texas Regional Outlook Reports, released in June and July 2002. The South Texas region is a combination of the Comptroller's Alamo, Coastal Bend, and South Texas Border Regions.

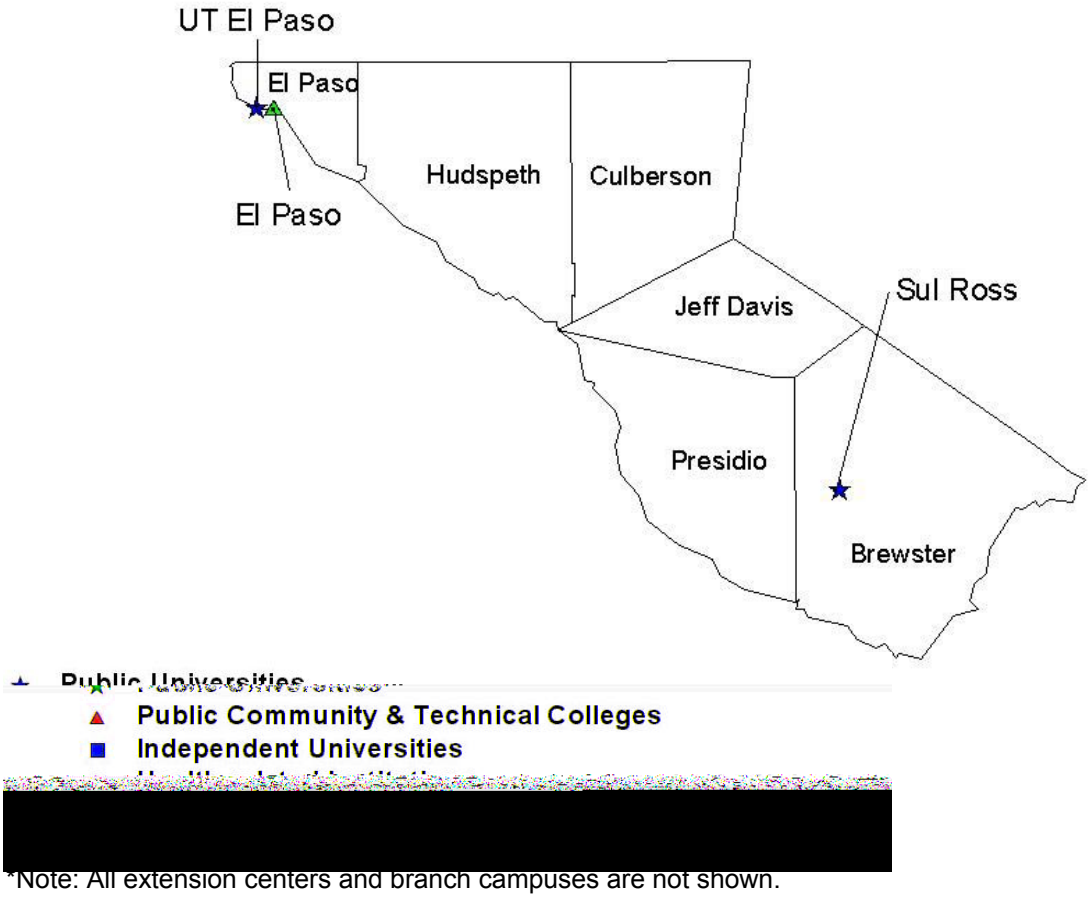
- The fastest growing jobs in the Alamo region (South Texas-North) are projected to be among computer scientists, followed by skilled machine operators, health service workers, health diagnosing workers, teachers, librarians, counselors, health technicians and technologists, health assessment and treating workers, life scientists and other professional workers. More job growth is anticipated in clerical, managerial and administrative, computer scientists/mathematicians/operations researchers, food preparation, and protective services.
- Border area (South Texas-South) job growth is anticipated in clerical, managerial and administrative, food preparation, protective services, and health care positions, as well as in jobs involving transportation trade with Mexico. The fastest-growing occupations include computer scientists, health service workers, engineers, health technicians, information clerks, health-assessment workers, life scientists, social scientist, architects, engineering and scientific technicians, and physical scientists, as well as teachers.
- In the Coastal Bend area (South Texas-South), the fastest growing occupations are led by a need for computer scientists followed by health service workers, engineers, health technicians, information clerks, health assessment workers, managerial and administrative workers as well as teachers. Nine of the top 25 occupations expected to grow the fastest during the next five years will require some advanced training beyond high school, and most of these will require either an associate's degree, a bachelor's degree or other advanced degrees.

Regional Summary

Most of the South Texas population is in the 15-to-34 age group, offering access to a large number of potential students. Unfortunately, this region has an extremely low high school educational attainment rate among the adult (25 plus) population. Collaborations between higher education and public education should be expanded to encourage more students to graduate from high school and continue into higher education. The rapid growth in the region will put pressure on many occupations, such as health care and teaching, to add qualified employees. Institutions in the region should ensure that programs are in place to supply those workers.

Considering the large number of institutions in the region and the large and quickly growing population, degree programs should be reviewed to determine needs and student interest. The institutions in South Texas should work together to review the needs and student interest in these programs. Because a large number of high-demand programs are not available, priorities must be set for the development of those most needed. Multi-institutional partnerships have contributed, and will continue to contribute, to the educational opportunities within the region.

Upper Rio Grande



*Note: All extension centers and branch campuses are not shown.
Updated maps including these sites will be available in spring 2003.

Demographics

- The population of the Upper Rio Grande region is projected to increase by approximately 21 percent to 893,572 people by 2015. The increase in the age 15-to-34 population is similar, at 22 percent (or 274,883 people—by 2015). This is the highest percent increase in the state for this age group, although not the greatest increase numerically.
- Currently, the racial/ethnic mix of the age 15-to-34 population in the Upper Rio Grande region is 14 percent White, 3 percent Black, and 81 percent Hispanic. The racial/ethnic mix of the age 15-to-34 population in the Upper Rio Grande region projected for 2015 is 9 percent White, 3 percent Black, and 86 percent Hispanic.
- Educational attainment is generally low. Only 65.6 percent of the region's adult (age 25 or older) population has a high school diploma or GED; 21.7 percent have an associate's higher degree (5th of 10 regions) and 16.7 percent have a baccalaureate or higher degree (tied for 7th of 10 regions).
- The region may be expanded to include students from the New Mexico (Las Cruces) and Mexico (Juarez) border areas, which reported 479,996 15-to-34 year olds in 2000.

Enrollment

- Of the 10 regions of the state, the Upper Rio Grande region leads in the percentage of students remaining within the region for their education. Of the 16,618 students from the region attending a university, 13,564 students (81.6 percent) remain in the region; of the 16,763 two-year college students, 16,413 remain in the region (97.9 percent). The region also leads the state with a 4.7 percent higher education participation rate.
- In fall 2001, Texas residents accounted for 15,481 (85 percent) of the students at universities (non-resident students from other states or other countries accounted for 15 percent of the total).
- Targeted enrollment growth for the region is over 10,000 additional students, with 76 percent of the targeted growth at the university level.
    - Through 2015, projections indicate a 782,647 square-foot deficit to accommodate an additional 8,000 students at the university level.
    - An additional 468 faculty members will be needed at the university level, and 164 faculty members at the two-year college level, by 2015.

Educational Opportunities

- The Upper Rio Grande region has two public universities, one public two-year college, and no independent colleges, public or independent health science centers, or MITC/USCs, for a total of three higher education institutions (the lowest number in the state).
- The University of Texas at El Paso in the Upper Rio Grande region offers several specialized programs which are not considered high-demand but add to the region's offerings, particularly at the doctoral level. For instance, UT-El Paso offers doctorates in pathobiology, environmental engineering, and community psychology.
- Program offerings in the Upper Rio Grande are the smallest among the five high-growth regions, primarily because of the small number of institutions in the region and because of the relatively low population.

Employment

All data included in this section is from the Texas Comptroller of Public Accounts (Comptroller's) Texas Regional Outlook Reports, released July 2002.

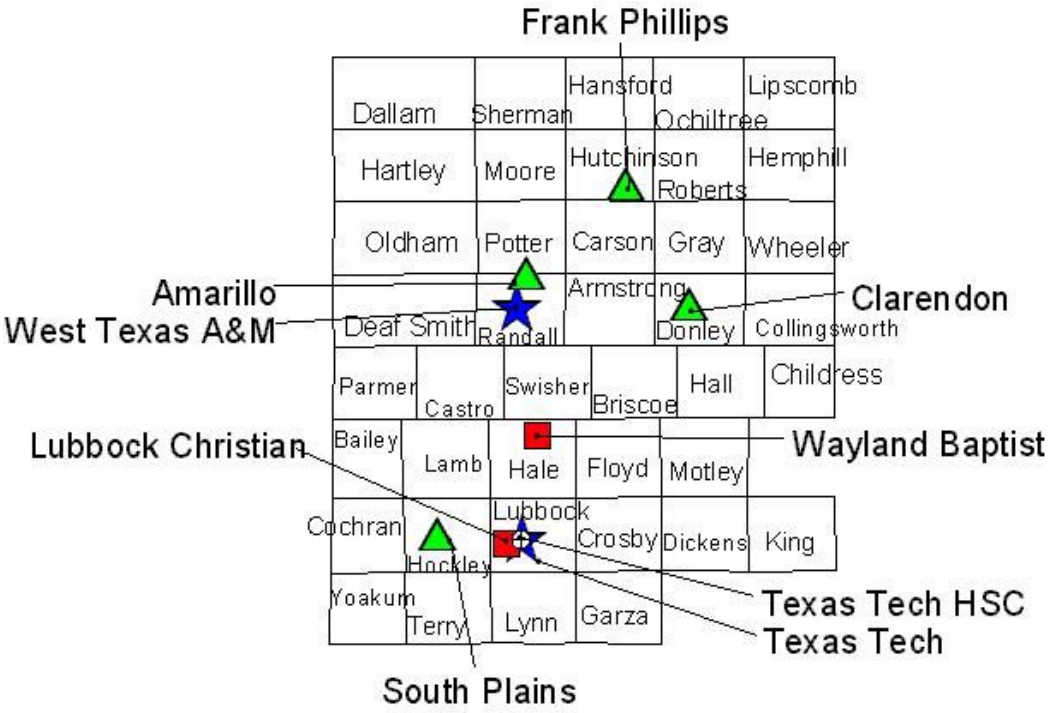
- A growing number of jobs related to trade facilitation is the region's greatest emerging strength.
- The region reports good growth in computer and data processing, in engineering services, and in research and testing services.
- The fastest growing jobs require training beyond high school. Most require an associate's, bachelor's, or higher degree and are projected to be computer scientists, health diagnosing and health service workers, and includes health assessment workers, health technicians, life scientists, social scientists, other technicians as well as teachers, librarians and counselors.
- The occupations projected to increase the greatest number by 2005 include protective services, clerical and other support services, computer scientists, managerial and administrative, and teaching.

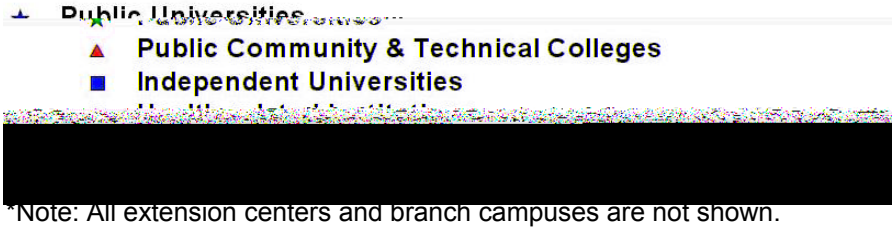
Regional Summary

Educational attainment levels among its adult population (over 25) are low. To change this over time, it is important to continue to emphasize P-16 collaborations to encourage and mentor students to complete high school and continue into college. Adult education efforts remain critical as in all regions where high school attainment levels are low. New and continued partnerships among institutions within and beyond the region will contribute educational opportunities to residents of the region.

The distance between El Paso (where the majority of the regional population lives) and the rest of the state and the fact that so many students remain in the region to attend college make it essential that program offerings support the needs of the region. Investment in education will be critical in changing the relatively under-educated population and weak economy of the region.

High Plains





*Note: All extension centers and branch campuses are not shown.
Updated maps including these sites will be available in spring 2003.

Demographics

- In 2000, almost 781,000 people lived in the High Plains region. Of these, 232,319 were in the 15-to-34 age group. Both the total population and age 15-to-34 population are projected to increase by a moderate 11-12 percent by 2015.
- Currently, the racial/ethnic mix of the age 15-to-34 population in the High Plains region is 59 percent White, 6 percent Black, and 33 percent Hispanic. The racial/ethnic mix of the age 15-to-34 population in the High Plains Region is projected for 2015 to be 51 percent White, 7 percent Black, and 41 percent Hispanic.
- Seventy-five percent of the population has at least a high school diploma, while 24.1 percent has an associate's or higher degree and 18.8 percent has a baccalaureate degree or higher.
- The region may be expanded to include students from the Oklahoma (Guymon) and New Mexico (Clovis, Portales) border areas, which reported a population of 16,757 15-to-34 year olds in 2000.

Enrollment

- Higher education participation within the region (4.3 percent) is slightly above the state average (3.9 percent). Approximately 79 percent (13,178) of the university students from the region remain in the region, and 96 percent (16,304) of the two-year college students remain in the region.
- In fall 2001, Texas residents accounted for 28,499 (88.8 percent) of the students at universities (non-residents from other states or other countries accounted for 11.2 percent of the total enrollment).
- Fall 2001 minority enrollment in the region is very low, with only 17 percent of the enrollment Hispanic, compared to 25 percent statewide. Black enrollment was only 4 percent regionally and 11 percent statewide.
- Targeted enrollment growth for the regions is relatively low with an increase of 14,700 students. Eighty-five percent of the growth is targeted at the university level.
    - Universities in the High Plains currently have a small space surplus. With the targeted growth, however, a space deficit will grow to 1.2 million square feet.
    - Additional faculty members will also be needed. To maintain the current student/faculty ratio, universities will need to add 953 faculty members and community colleges will need 113 more faculty members.

Educational Opportunities

- The High Plains region has two public universities, four public two-year colleges, two independent colleges, one public or independent health science center, and no MITC/USCs, for a total of nine higher education institutions.
- Overall the region has a good range of program offerings at the baccalaureate and master's levels.

Employment

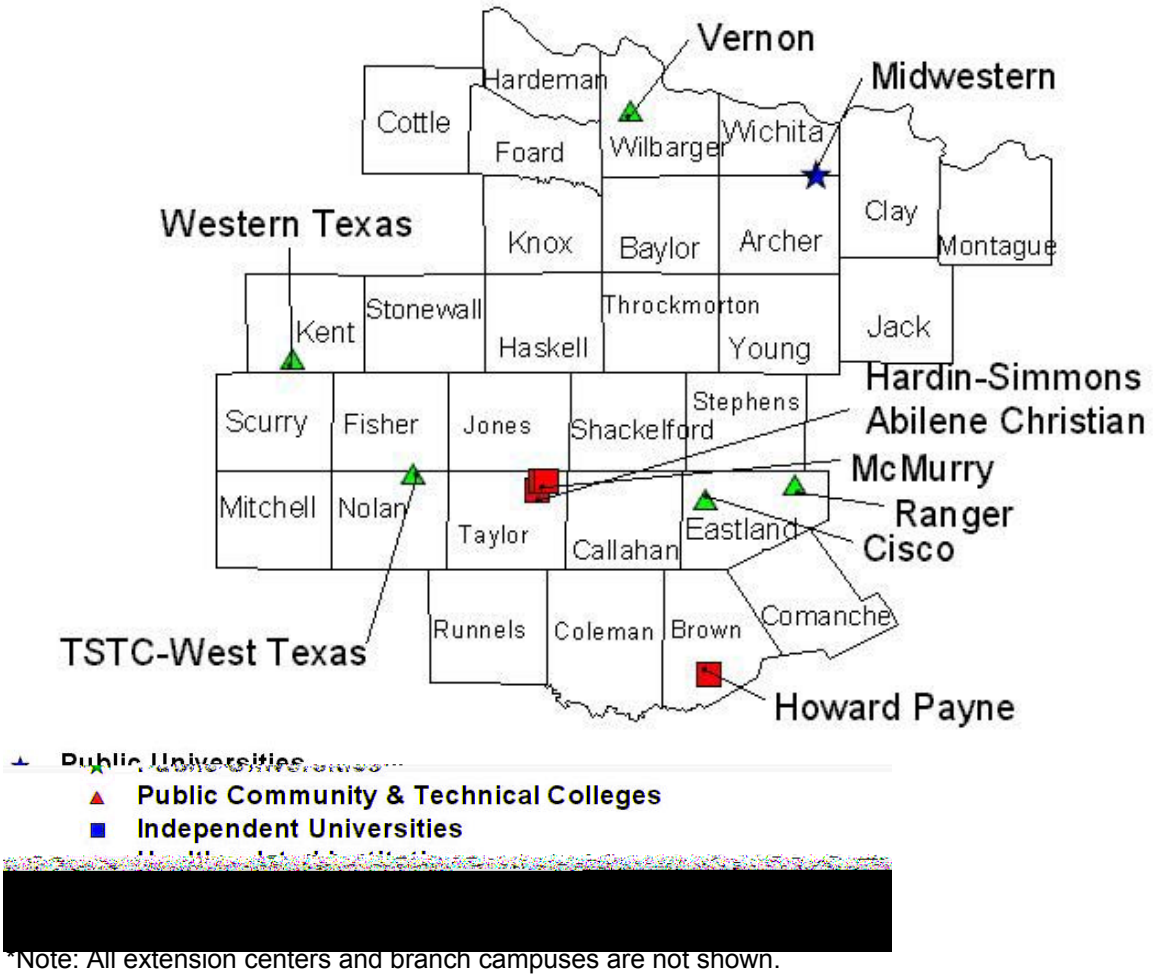
All data included in this section is from the Texas Comptroller of Public Accounts (Comptroller's) Texas Regional Outlook Reports, released July 2002.

- The occupations expected to add the most positions are anticipated in the areas of managerial and administration, clerical, food preparation, motor vehicle operators, computer scientists/mathematicians/scientists, and protective services.
- The fastest percentage growth is led by the need for additional communication equipment personnel, computer scientists, lawyers, engineers, engineering and scientific technicians, health care diagnosticians, workers, information clerks, and other professional workers.

Regional Summary

There are adequate education opportunities in this region, due in part to several initiatives. For example, additional opportunities were created in the 2001-2002 academic year, when Texas Tech University and South Plains College jointly sponsored the Gateway Program to promote access to higher education. Multi-institutional partnerships have contributed, and will continue to contribute, to the educational opportunities within the region.

Northwest Texas



*Note: All extension centers and branch campuses are not shown.
Updated maps including these sites will be available in spring 2003.

Demographics

- The Northwest region is among the least populated of the 10 regions, with 549,267 people reported living in the area in 2000 and 583,305 people projected by 2015. The region has the state's lowest projected population growth rate (6 percent). The age 15-to-34 population is projected to increase by 9 percent (also the state's lowest), to 167,647 people by 2015.
- Currently, the racial/ethnic mix of the age 15-to-34 population in the Northwest Texas region is 70 percent White, 8 percent Black, and 20 percent Hispanic. The racial/ethnic mix of the age 15-to-34 population in the Northwest Texas region is projected to be 64 percent White, 9 percent Black, and 25 percent Hispanic by 2015.
- Approximately 76.1 percent of the population has a high school diploma, 21.4 percent has an associate's or higher degree (compared to a state average of 28.5 percent), and 16.7 percent has a bachelor's or higher degree (compared to a state average of 23.2 percent).

- The region may be expanded to include students from the Oklahoma border area (Ardmore, Frederick, Altus), which reported a population of 13,229 15-to-34 year olds in 2000.

Enrollment

- Of the 10 regions, the Northwest region has the second-highest percentage (62.6 percent) of university students enrolled outside the region. The Northwest region ties with the Southeast region, at 14.1 percent, in the highest percentage of students enrolled in two-year colleges outside of the region.
- Total public higher education enrollment in the region is 18,337 students (10,207 in a university and 8,130 in a two-year college), with approximately 7,536 students enrolling outside the region. The region's 3.3 percent higher education participation rate is the lowest among the regions; the state average is 3.9 percent.
- In fall 2001, Texas residents accounted for 5,273 (94.1 percent) of the students at universities (non-resident students from other states or other countries accounted for 5.9 percent of the total enrollment).
- This region has the smallest targeted enrollment increase, based on having the smallest projected population increase in the state.
- Projected space needs through 2015 at the university level for this region indicate a moderate 230,000 square-foot deficit to accommodate an additional 3,100 students.

Educational Opportunities

- The Northwest region has one public university, five public two-year colleges, four independent colleges, no public or independent health science centers and no MITC/USCs, for a total of 10 higher education institutions.
- There are limited program opportunities at the bachelor's and master's levels within the region since there is only one public university. That institution should review the high-demand programs and student interest to see if any of these programs may be needed.

Employment

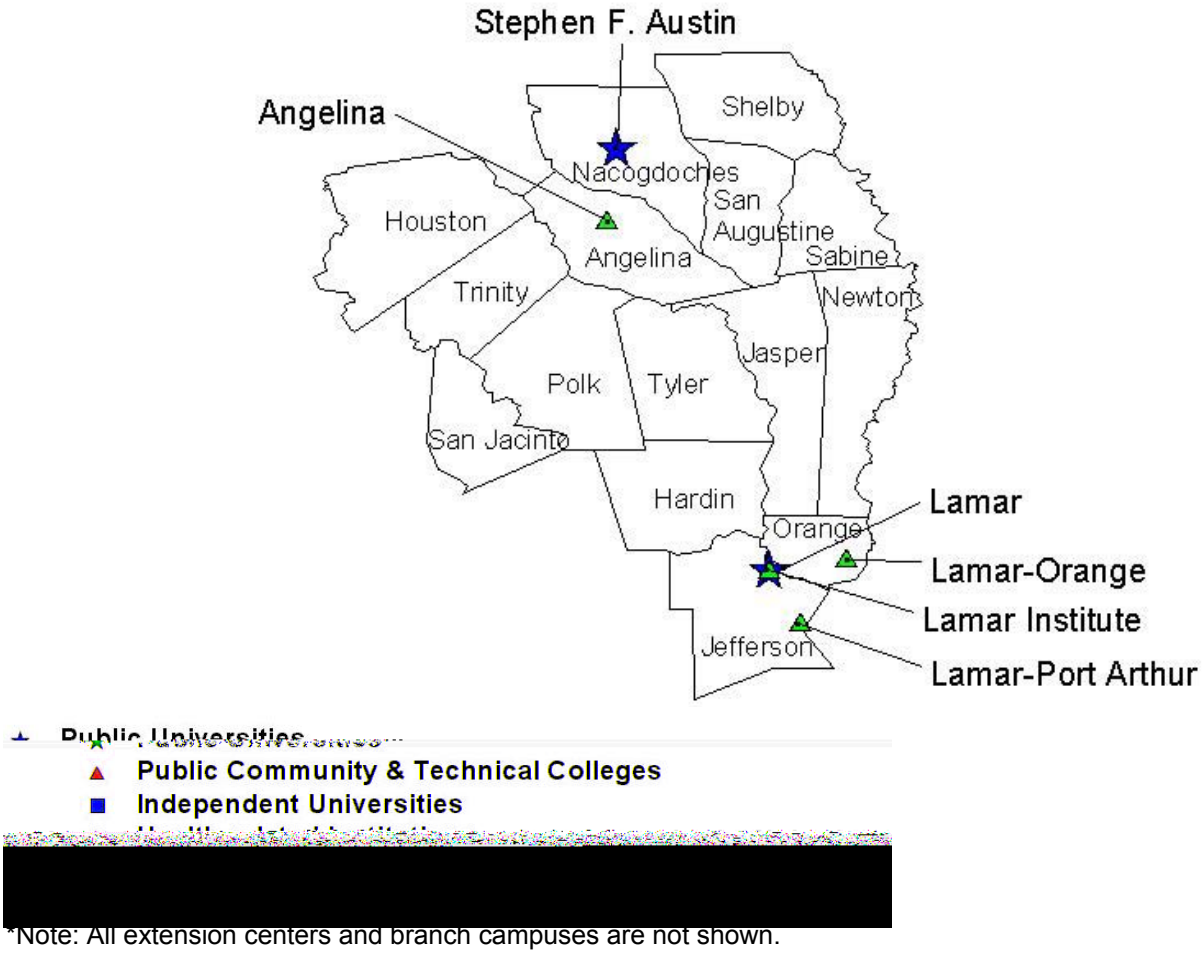
All data included in this section is from the Texas Comptroller of Public Accounts (Comptroller's) Texas Regional Outlook Reports, released July 2002.

- Some areas of high tech, like aerospace, have seen some job losses. Other parts of high tech, in particular computer programming and data processing, have been consistent sources of job growth.
- Job categories expected to grow at the fastest rates include computer scientists and communication equipment workers, health service workers, teachers, librarians, counselors, lawyers, health diagnosing workers, other technicians, information clerks, health technicians and health assessment workers.
- The occupations expected to add the most positions are managerial and administrative, clerical, teaching, and computer scientists/mathematicians/operations researchers.

Regional Summary

Despite the low population and enrollment growth expected in the region, community colleges may require state assistance for facilities. The community colleges in the region are hampered by low assessed valuations in many of their districts. Multi-institutional partnerships are one approach to expanding the educational opportunities and facility usage efficiencies within the region.

Southeast Texas



*Note: All extension centers and branch campuses are not shown.
Updated maps including these sites will be available in spring 2003.

Demographics

- The population of the Southeast Texas region is projected to increase at one of the slowest rates in the state—8 percent, or 64,743 people, to 805,695 people by 2015.
- Another relatively slow increase is the forecasted 12 percent increase in the age 15-to-34 population for this region (from 202,035 people in 2000 to 229,394 age 15-to-34 people by 2015).
- The racial/ethnic mix of the age 15-to-34 population in the Southeast Texas Region for 2015 is projected to be 57 percent White, 25 percent Black, and 16 percent Hispanic, giving the region one of the highest proportions of Whites and Blacks and among the lowest proportion of Hispanics in its population.
- The percent of adults with a high school diploma or GED (75.2 percent) approximates the state average (75.7 percent); unfortunately, the region ranks lowest in the state in adults with an associate degree or higher (18.4 percent) or a baccalaureate or higher (13.9 percent).
- The region may be expanded to include students from the Louisiana border area (Shreveport and Bossier City), which reported a population of 74,554 15-to-34 year olds in 2000.

Enrollment

- Approximately two-thirds (67.3 percent, or 10,436 students) of the region's university students are enrolled within the region. The Southeast region ties with the Northwest region for the highest percentage of local students attending two-year colleges outside of the region (14.1 percent).
- In fall 2001, Texas residents accounted for 19,679 (96 percent) of the students at universities (non-residents from other states or other countries accounted for 5.9 percent of the total enrollment).
- Targeted enrollment for the region matches the population growth as the second lowest at only 5,571, with 59 percent of the growth in the two-year sector.
- Faculty and facility space needs through 2015 project modest increases.

Educational Opportunities

- The Southeast Texas region has two public universities, four public two-year colleges, and no independent colleges, public or independent health science centers, or MITC/USCs, for a total of six higher education institutions.
- The region provides a wide range of high-demand programs at the baccalaureate level. Program offerings at the master's level are more limited, but planning authority is approved in many areas.
- Panola College, located in Panola County just north of Shelby County, will soon be offering classes in its new Shelby Regional Training Center. A joint project of Panola College, the City of Center, Shelby County, Center Economic Development Corporation, and Center and Shelby Independent School Districts, the $2.25 million facility will began offering an industrial technology program in fall 2002.

Employment

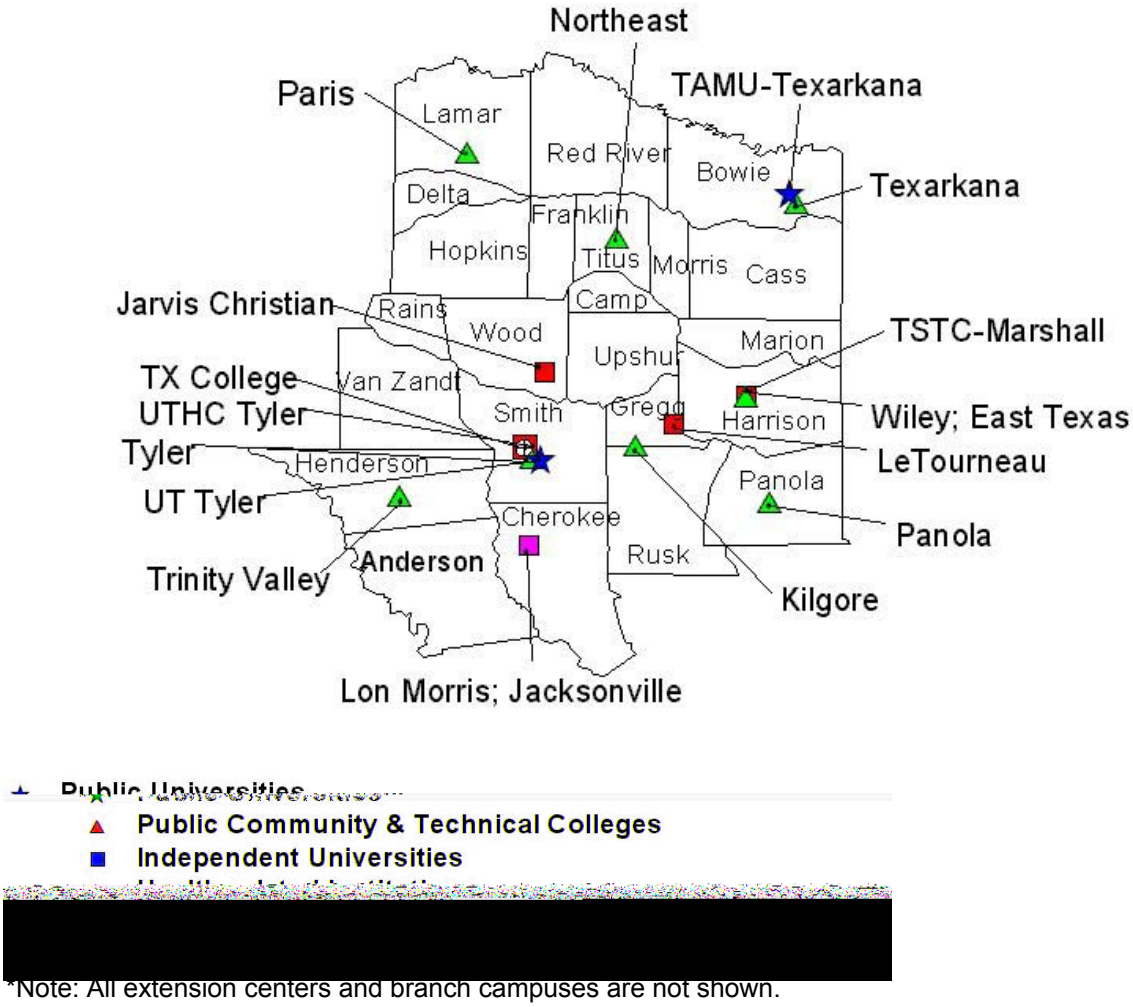
All data included in this section is from the Texas Comptroller of Public Accounts (Comptroller's) Texas Regional Outlook Reports, released May 2002.

- The fastest growing jobs are projected to be among computer scientists, communication equipment personnel, lawyers, life scientists, health care diagnosticians, general technicians, information clerks, engineers, and other professional workers.
- The largest number of new positions are expected in the managerial and administrative, clerical, construction trades, protective services, and computer science/mathematicians/operations researcher occupations.

Regional Summary

The institutions of higher education in this region appear to be meeting the needs of the region. Institutions in the region should review the need for high-demand programs for which planning authority has already been granted to see if there is sufficient student demand to begin implementation of the program. Multi-institutional partnerships have may expand the educational opportunities within the region.

Upper East Texas



*Note: All extension centers and branch campuses are not shown.
Updated maps including these sites will be available in spring 2003.

Demographics

- The Upper East Texas region expects a 9 percent increase in overall population to 1.1 million people by 2015. The region included 264,770 residents in the 15-to-34 age group in 2000, a figure anticipated to increase by 11 percent to 297,918 by 2015.
- The 2015 racial/ethnic mix of the age 15-to-34 population in the Upper East Texas Region is projected to be 62 percent White, 19 percent Black, and 17 percent Hispanic (the second-highest percent of Whites and Blacks in the state).
- Among adults 25 or older, 75.1 percent have a high school diploma, 20.8 percent have an associate's degree, and 15.3 percent have a baccalaureate degree.
- The region may be expanded to include students from the Oklahoma (Idabel) and Louisiana (Texarkana) border areas, which reported a population of 9,345 15-to-34 year olds in 2000.

Enrollment

- Enrollments have been steady or declining since 1992, and are expected to continue on that path through 2015.
- The higher education participation rate is 3.6 percent, slightly below the state average of 3.9 percent. The region has the highest percentage of students attending universities outside of the region (71.6 percent) and a below state-average number of students attending two-year colleges (4.1 percent, compared to 5.3 percent state average). Only 1.4 percent of the region's population is enrolled in universities—the lowest university participation rate in the state. This region did not have a full four-year university available to students, without enrollment caps, until the fall of 2002.
- In fall 2001, Texas residents accounted for 4,479 (90.5 percent) of the students at universities (non-residents from other states or other countries accounted for 9.5 percent of the total enrollment).
- The region's targeted enrollment of 12,838 students is relatively high when compared to recent enrollment trends. Approximately one-half of the enrollment target is expected at the two-year level.
    - Projected space needs through 2015 at the university level for this region indicate a 1.55 million square-foot deficit to accommodate an additional 6,550 targeted students.
    - An increase of 480 faculty members will be needed at the university level and 360 faculty members will be needed at the two-year college level by 2015.

Educational Opportunities

- The Upper East Texas region has one public university, one public upper-level university, eight public two-year colleges, seven independent colleges, and no public or independent health science centers or MITC/USCs, for a total of 17 higher education institutions.
- Although The University of Texas Health Science Center at Tyler is in the region, the facility primarily conducts research and does not enroll students.
- The region includes the state's only independent two-year, lower-division colleges and three of the state's six independent historically Black universities.
- There are many programs in the high-demand degrees that are not offered in the region at either the baccalaureate or master's degree level.
- Several local programs are in place to encourage participation in higher education. For example, "Expanding Your Horizons" is an annual conference of career workshops for young women in middle school. The program, focusing on science, math, engineering, and technology topics, reported a record of more than 750 students attending its February 2002 conference.

Employment

All data included in this section is from the Texas Comptroller of Public Accounts (Comptroller's) Texas Regional Outlook Reports, released July 2002.

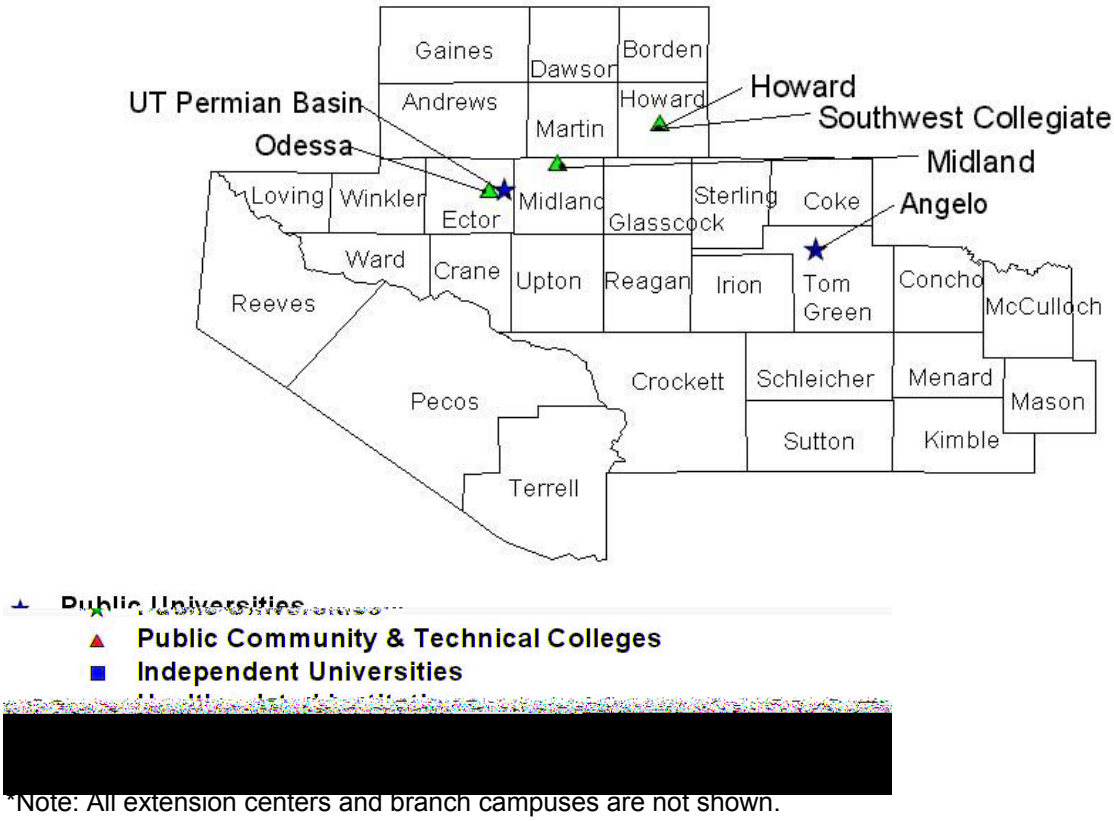
- The fastest growing occupational titles are projected to be computer scientists, followed by health service workers, skilled machine operators, health diagnosing workers, teachers, librarians, counselors, health technicians and technologists, health assessment and treating workers, information clerks, and life scientists.

- The largest growth is expected in food preparation, managerial and administrative, clerical, teaching, personal service, and computer science/mathematician/operation researcher positions.

Regional Summary

The institutions in the region should review the high-demand programs currently not available to see if there are programs that should be considered for implementation. Additional programs, including those provided by multi-institutional partnerships, will contribute to the educational opportunities within the region and may reverse the region's low student participation rate at universities.

West Texas



*Note: All extension centers and branch campuses are not shown.
Updated maps including these sites will be available in spring 2003.

Demographics

- The population of the West Texas region is projected to increase at a moderate 10 percent, from 524,884 people in 2000 to 582,752 people in 2015. The increase in the age 15-to-34 population is slightly greater (13 percent), reflecting a projected increase from 146,016 people in 2000 to 168,245 people by 2015. In 2000, the West Texas region was the least-populated region of the state, and is projected to remain through 2015.
- The racial/ethnic mix of the age 15-to-34 population in the West Texas region is projected for 2015 to be 42 percent White, 5 percent Black, and 52 percent Hispanic.
- Educational attainment ranks among the three lowest regions. Approximately 71.2 percent of adults in the region have a high school diploma or equivalent, 21.3 percent have an associate's or higher degree, and 16.4 percent have a baccalaureate or higher degree.
- The region may be expanded to include students from the New Mexico border area (Hobbs), which reported a population of 8,267 15-to-34 year olds in 2000.

Enrollment

- Total higher education enrollment of students from the region is 23,088 students, with 11,146 of them enrolled in universities. Of the students attending a university, 51.9 percent or 5,785 students, do so within the region. Of the 11,942 two-year college students, 91.7 percent, or 10,955 students, remain within the region.
- Participation of residents from the region in both universities (2.1 percent) and two-year colleges (2.3 percent) is above the state average.
- In fall 2001, Texas residents accounted for 8,366 (96.5 percent) of the students at universities (non-residents from other states or other countries accounted for 3.5 percent of the total enrollment).
- The targeted enrollment for the West Texas region is a modest 6,700, with about 75 percent at the two-year level.
    - Through 2015, projections indicate a 154,691 square-foot deficit at universities to accommodate an additional 1,675 students.
    - Anticipated faculty needs are relatively low.

Educational Opportunities

- The West Texas region has two public universities, three public two-year colleges, and no independent colleges, public or independent health science centers, or MITC/USCs, for a total of 5 higher education institutions.
- There are many programs in the high-demand degrees that are not offered in the region at either the baccalaureate or master's degree level.

Employment

All data included in this section is from the Texas Comptroller of Public Accounts (Comptroller's) Texas Regional Outlook Reports, released May 2002.

- The fastest growing occupation titles in the region are computer scientists and communication equipment personnel, as well as process machine operators, lawyers, scientists, technicians, health care diagnosticians, information clerks, and other professional workers.
- Occupations with the largest expected growth include managerial and administrative, clerical support, motor vehicle operators, and computer science/mathematician/operation researcher positions.

Regional Summary

The institutions in the region should review the high-demand programs currently not available to see if there are programs that should be considered for implementation. Enrollment at the public universities in the region has remained steady since 1991. That trend is expected to continue. Multi-institutional partnerships will contribute to the educational opportunities available within the region.

Projected Resource Needs

Future enrollment growth will stress the resources of Texas higher education institutions. The state's higher education enrollments increased by more than 50,000 students (5 percent over the previous fall) in fall 2001, the greatest increase in more than 25 years. The Coordinating Board's new enrollment forecast, due January 2003, will reflect this trend and include updated enrollment projections through 2015.

Although student enrollment has increased at near-record levels in recent years,, the great need to increase high school graduation rates and student preparation for college remains. The number of high school dropouts is a problem that extends beyond public education and education in general; tremendous benefits to society are obtained through raising education at all levels. In response, a variety of partnerships have been established among higher education institutions, public school districts (P-12), businesses, and civic and other community organizations throughout the state. The higher education link with school districts to make a seamless P-16 educational experience is strengthening, but consideration of new approaches and programs continues to be necessary. Appendix A includes a table identifying educational attainment throughout the state, and reflects opportunities for improvement at all levels. The state's new *College for Texans* campaign, launched in November 2002, is an example of a program designed to encourage students to complete their high school education and continue on to college.

In addition to recruitment and participation efforts, institutions are also addressing the need to retain students through completion of their degree or certificate program. All of these efforts present the state with the formidable task of adequately serving the needs of students. While enrollment increases are good news, the time has come to anticipate the need for facilities, additional faculties, and to explore new ways to ensure efficient and effective use of existing resources. The Coordinating Board is committed to working with representatives of each institution, district, and system to maximize the utilization of public resources.

Targeted Enrollment. Public institutions submitted their enrollment targets for 2015 to the Coordinating Board in connection with the *Closing the Gaps* higher education plan. As expected, most (88 percent) of the targeted enrollment growth will be in the five high-growth population regions of the state. The tables in this section display the targeted growth provided by each institution in each region. Targeted enrollment figures represent enrollment targets provided by each institution, and should not be confused with forecasted enrollment.

At public community, technical, and state colleges, the targeted enrollment growth almost mirrors that of the population growth, with 91 percent of the targeted enrollment growth in the five high-growth regions. Of the five regions, the Upper Rio Grande is the one area where projected population growth falls below targeted enrollment growth; however, the projected population change is significant within this region.

Already, public community and technical colleges perform a key role in drawing Texas students into higher education, and the importance of their contributions will continue to increase as targeted enrollments are achieved. In the fall semester of 2001, more than

68 percent of the state's of first-time college students enrolled at a community or technical college (excluding concurrently enrolled high school students). This percentage is projected to be even greater for the 300,000 additional "nontraditional" students targeted by the *Closing the Gaps* plan, who may be older, low-income, and/or part-time students. Limitations on facilities and/or lack of available faculty to support larger growth requires additional study.

For public universities, the large enrollment growth regions match the high growth population regions, with the exception of Central Texas. Though Central Texas includes three public universities, a multi-institution teaching center (MITC), and a university system center (USC), space for additional students may be a limiting factor. Two of the public universities in Central Texas have reached their maximum enrollment and have instituted enrollment caps (The University of Texas at Austin and Texas A&M University). The third university, Southwest Texas State University, has not instituted an enrollment cap, although the campus operates at a significant space deficit. For these reasons, to best serve the needs of local students, there will be a need to focus efforts on the Round Rock Higher Education Center and the Tarleton State University – Central Texas in Killeen to offer regional students access to baccalaureate and above programs within the region.

Facilities. At the university level, projected statewide space needs through 2015 indicate a 15 million square-foot deficit to accommodate an additional 168,600 students. The current (2001) space deficit totals 2.0 million square-feet, with Central Texas representing one-half of the amount. Regions with the greatest projected space needs for their universities include the Metroplex (4.31 million square feet), South Texas (3.2 million square feet), and the Gulf Coast (2.4 million square feet). A slight space surplus currently exists in four regions of the state, implying some short-term opportunities exist for maximizing facility usage. However, all 10 regions are projected to reach space deficits by 2015.

Public University Projected Faculty and Space Needs Based on Institutional Targets for *Closing the Gaps*

Region	Enrollment		Faculty		Space Surplus/(Deficit)	
	2015 Target*	Increase from 2001	2015**	Increase from 2001	2015***	2001
Central Texas	121,900	3,149	8,135	210	(1,237,390)	(1,014,177)
Gulf Coast	103,460	23,794	7,083	1,629	(2.436.555)	(836,303)
High Plains	44,548	12,457	3,408	953	(1,152,524)	111,497
Metroplex	135,964	50,626	8,460	3,150	(4,305,781)	(89,647)
Northwest	9,050	3,090	490	167	(229,725)	17,932
South Texas	113,586	56,943	6,378	2,815	(3,167,001)	(139,362)
Southeast Texas	22,778	2,285	1,303	131	(14,788)	176,793
Upper East Texas	11,497	6,546	843	480	(1,545,569)	3,785
Upper Rio Grande	26,219	8,007	1,532	468	(782,647)	(206,616)
West Texas	10,340	1,675	541	88	(154,691)	(63,822)
Statewide	599,342	168,572	38,173	10,091	(15,026,671)	(2,039,920)
South Texas - South	78,148	44,125	4,590	2,168	(2,170,129)	63,503
South Texas - North	35,438	12,818	1,788	647	(996,872)	(202,865)

Notes: * Enrollments based on the institutional targets submitted for *Closing the Gaps*.
** Faculty increases are based on the current student/faculty ratios at the institutions and targeted enrollment submitted by the institutions.
*** Space surplus/deficits are calculated using the Coordinating Board space model and targeted enrollments submitted by the institutions and include space approved through FY 2002.

Texas' 50 community college districts receive state funding only for instructional costs, with local taxes providing revenue for facilities and other functions (the Texas State Technical College System and the three state colleges receive state-support for facilities). Many of the community college districts have inadequate tax bases to support state-of-the-art educational programs. At least 23 districts do not meet the statutory minimum standard (established in 1985) for establishing new community college districts, which requires a minimum assessed valuation of $2.5 billion and 15,000 scholastics, or students, enrolled in K-12. The financial situation is particularly difficult for rural college districts, limiting their ability to serve students who may be dispersed over a large area. Appendix F provides a summary of net assessed valuation by district.

Since facilities for public community colleges are locally funded, there is no existing systematic study of maintenance costs, capacity, and facility needs of these institutions. Moreover, the increasing availability of Internet courses and other forms of distance education means that adding enrollment will not always require the construction of new facilities. Nevertheless, colleges located in high growth regions of the state will certainly need to examine their current use of space and will most likely need to expand their

classroom space to accommodate new students. The need is particularly acute in South Texas, where the rapidly expanding South Texas Community College is already struggling to find space for its existing student population. It is doubtful that local tax revenues will be sufficient to support the demand for increased capacity in the coming years.

Access to higher education is often limited by distance and cost considerations. Many Texas residents live outside of a community college taxing district, which means that they must pay much higher out-of-district tuition rates. In addition, there are large areas of the state, especially in West Texas, that lie outside of a 30-mile radius of a community college district. Several distance education programs are available to serve these students, but for many community college students—who tend to represent the first generation of their family to attend college, or who are often less prepared—there are considerations that make them less likely to be able to benefit from distance education.

Nontraditional students are often well served by the lower tuition rates, smaller classes, flexible schedules, and open admissions offered by community and technical colleges. For these reasons, maintaining and strengthening the viability of the public two-year colleges is expected to be a significant factor in achieving the goals of the *Closing the Gaps* plan. This will be particularly important in the three regions projected to experience the highest growth rates: South Texas, Gulf Coast, and Metroplex.

Public Two-Year Colleges Projected Faculty Needs Based on Institutional Targets from *Closing the Gaps*

Region	Enrollment		Faculty	
	2015 Target*	In Baccalaureate crease from 2001	2015**	Increase from 2001
Central Texas	86,437	22,492	4,499	1,171
Gulf Coast	192,400	80,804	9,634	4,046
High Plains	21,405	2,272	1,063	113
Metroplex	173,811	63,425	9,714	3,545
Northwest	10,440	1,685	718	116
South Texas	120,708	26,630	5,641	1,251
Southeast Texas	14,910	3,286	903	199
Upper East Texas	34,467	6,292	1,971	360
Upper Rio Grande	20,897	2,541	1,351	164
West Texas	17,306	5,041	1,070	312
Statewide	692,781	214,468	36,562	11,275
South Texas - South	56,135	11,830	2,269	478
South Texas – North	64,573	14,800	3,372	773

Notes: * Enrollments based on the institutional targets submitted for *Closing the Gaps*.
** Faculty increases are based on the current student/faculty ratios at the institutions and targeted enrollment submitted by the institutions.

Faculty. To maintain the current student/faculty ratio at institutions, an additional 10,091 faculty members will be needed at the university level and 11,275 faculty members will be needed at the two-year college level by 2015. All 10 regions are forecasted to need additional faculty, ranging to a high of 3,150 faculty members at one university, and a high of 4,046 faculty members at one two-year college. Three regions account for 77 percent of the total faculty needs by 2015: Metroplex (6,695), Central Texas (5,675), and the Gulf Coast (4,066).

A wave of retirements among faculty members who began their careers in the 1960s and 1970s is expected. Some faculty positions at two-year colleges are difficult to fill because of the nature of the teaching discipline or the location of the college. Rural colleges that are far from a university often face difficulty in recruiting qualified faculty members in general. Statewide, positions in computer science/technology, nursing, and mathematics are becoming more difficult to fill. The state may have to develop new strategies for training and retaining new faculty members to fill these gaps.

Although the projected total faculty needs for universities and two-year colleges are similar, it is important to note the compounding effect that satisfying the projected faculty needs will have on the state's institutions. Those effects include additional demands on personnel departments; allocating office space to new and existing faculty; providing desks, computers and staff support; parking access; and the increased financial strain on department budgets, as well as payroll and benefit areas, among others.

As noted at the beginning of this document, it represents the first long-range plan for higher education. Beyond the observations and options presented in this plan, future topics may include forecasting degree program needs, economic growth through higher education, the relationship of degrees to anticipated workforce needs, the cost/benefits of educating non-resident students in Texas, or the extent of partnerships among institutions within or beyond regional boundaries.

Summary

If enrollment targets are meet:

- *The high-growth regions (South Texas, Metroplex, Gulf Coast, Central Texas, and Upper Rio Grande) are expected to have 88 percent of the enrollment growth to 2015.*
- *Of first-time college students, more than 68 percent are likely to enroll at two-year colleges.*
- *In high-growth regions, community colleges may need financial help to build facilities to accommodate more students.*
- *The Coordinating Board should work with universities and community college districts in identifying opportunities to increase effective and efficient utilization of existing facilities.*
- *The state is expected to have a space deficit of 15 million square feet, with 11.9 million square feet of that amount in the high-growth regions if universities continue to deliver services in the same manner.*
- *Community colleges are expected to need more than 11,000 additional faculty and universities will need more than 10,000 additional faculty members by 2015 if enrollment targets are achieved.*

Summary

The state's population, particularly the age 15-to-34 group, is expected to increase significantly in the Central, Gulf Coast, Metroplex, South Texas, and Upper Rio Grande regions (representing 95 percent of the state's total growth and 88 percent of the 15-to-34 population growth). Three regions, the Metroplex, Gulf Coast, and South Texas regions, account for almost 80 percent of the targeted enrollment growth statewide.

If the state's public colleges and universities achieve the enrollment targets they reported in response to *Closing the Gaps by 2015*, enrollment growth will be greatest in the Metroplex, Gulf Coast, and South Texas regions at both the university and two-year colleges. Several continuously changing factors affect the delivery of higher education in each region of the state, and these factors are predicted to change at different rates through 2015.

- In high growth regions, community colleges may require new types of state assistance if facilities are to accommodate the number of new students expected.

- The state's universities are expected to have a space deficit of 15 million square feet, with 11.9 million square feet of that amount in the high-growth regions, if universities continue to deliver services in the same manner.

- Community colleges will need more than an estimated 11,000 additional faculty and universities will need an estimated additional 10,000 faculty by 2015 if enrollment targets are achieved.

- High-demand baccalaureate and master's programs are available in most regions.

- The Coordinating Board methodology for determining the need for additional professional schools should be applied before any new professional schools are created.

- Some program areas are available in all regions, but increased effort needs to be made to enroll and graduate additional students.

- The Upper Rio Grande is the only region out of the five fastest growing regions not to include an independent institution. Also, Southeast Texas and West Texas regions also do not have independent institutions.

Faculty and Facility Needs. Increasing enrollment will require additional facilities and the hiring of more faculty. Several university campuses in the high-growth regions already have a space deficit, which is expected to increase. Many faculty positions are already difficult to fill. Options to consider include:

- Conduct a study of maintenance costs, capacity, and facility needs of public community colleges. Large increases in community college enrollments may be stretching resources at community colleges in high-growth areas. The study should consider the question of providing partial state funding of community college facilities.

- The Coordinating Board should work with universities and community college districts in identifying opportunities to increase effective and efficient utilization of existing facilities.

- The Coordinating Board should study the feasibility of using the state's electronic admission's application to refer students to institutions with available facilities or to offer incentives for students to attend those institutions with existing capacity.

- Program areas without sufficient student demand to be offered through traditional methods should be delivered through distance education/electronic delivery until student demand in the region is sufficient to justify the new program.

- The Coordinating Board should study future faculty needs at all levels of higher education throughout the state.

Educational Opportunities and High-Demand Programs. Overall, a broad range of educational opportunities are available to students in all regions. The state has two underlying issues: 1) critical field areas where programs are available, but students are not enrolling and graduating in sufficient number to meet job market demand; and 2) offering high-demand programs in regions where they are not currently available. Two-year colleges continue to work closely with the business community and others in their communities and regions. For this reason, the programs provided by two-year colleges were not reviewed in this plan.

High-demand university degree programs were analyzed through a three-step process. First, programs producing 200 or more baccalaureate degrees, 50 or more masters degrees, or 30 or more doctorates were identified as high-demand programs. The second step was to review the degrees available in each region, including new programs which have been approved but have not yet produced graduates. The third step was to determine high-demand programs for which an institution within the region currently has planning authority or programs that are offered by an independent institution in the region. The high-demand degree tables provided previously present a regional summary of potential gaps in services which institutions may wish to consider for new program offerings. The summary of potential gaps in high-demand programs includes:

- Institutions within each region should work together to review the high-demand programs missing from their region to determine need and student interest before bringing forward new programs for review and approval by the Coordinating Board. Coordinating Board staff plan to hold meetings with representatives of institutions in each region to discuss how institutions can best work together to identify and address any unmet high-demand degree program needs in their regions. Program proposals submitted to address unmet needs would go through the Coordinating Board's normal review and approval process.

- Continue to employ the Coordinating Board's methodology for determining when and where new professional schools might be needed.

- Before creating new medical schools, expanding existing schools, or starting new extension initiatives, the Legislature should ensure that existing schools and regional academic health centers have funding sufficient to support their missions. However, if additional medical schools are to be created, two areas of the state meet the criteria identified in the report: the Upper Rio Grande region and the South Texas - South region.

- There is no compelling reason for the state to establish a new law school at this time. However, some regions have significantly less access to legal services than other regions and/or are under-represented in the state's law school student population. To increase the state's supply of lawyers, the state could encourage moderate enrollment increases in the state's smaller public law schools, improve retention and graduation rates, and increase passing rates on the State Bar Exam. A special loan repayment program could be developed for lawyers practicing in underserved areas. Finally, programs could be established to increase enrollment of law students from underserved areas.

- Additionally, there does not appear to be a current need to create a new school of veterinary medicine in Texas, although there is maldistribution of veterinarians across regions of Texas and a shortage of veterinarians specializing in large animal medicine. Should it be determined that more veterinarians are needed, class capacity at Texas A&M University's College of Veterinarian Medicine could be increased by ten to 20 students. Additionally, a special loan repayment program could be developed to encourage veterinarians to practice in large animal medicine in rural areas.

Each high growth region is summarized as follows:

Central Texas offers a wide variety of programs from the bachelor's to professional level. However, because of the enrollment caps at The University of Texas at Austin and Texas A&M University, and the fast growth of Southwest Texas State University, attention should focus on the Round Rock Higher Education Center and the Tarleton State University – Central Texas in Killeen to accommodate regional increases in university enrollments. Additional opportunities at the baccalaureate and master's level may need to be provided to students who are unable to travel for their education or unable to gain admission to the universities in the region. There are also opportunities at the local community and technical colleges for students to receive academic, technical, and adult basic education.

The **Gulf Coast** also offers a wide range of programs and has established new access points with the addition of growing MITCs and USCs. The additional strengthening of facilities and programs at both Prairie View A&M University and Texas Southern University will help accommodate expanding student enrollments in the region. With the large number of institutions in the region and the differences in student demand across institutions, there appears in the near term to be some potential for the shared use of facilities among the region's institutions. The community colleges in this region are targeting an increase of over 80,000 students with facilities likely to be an issue.

The **Metroplex** is well-served by the volume of high-demand programs offered and space is currently available at some of the existing universities. However, the region will have the largest space deficit in the state if institutional targets for the 2015 *Closing the Gaps* targets are reached. Additional access is afforded by the Downtown Center and the University of North Texas System Center at Dallas. Dallas County Community College has had dramatic enrollment increases from 2001 through 2002. As with community colleges in other regions, the region's community college districts' current facilities may be inadequate to handle future enrollment increases.

South Texas has the highest percentage of its population in the 15-to-34 age group. Unfortunately, this region has an extremely low high school educational attainment rate among its adult (over 25) population. Collaborations between higher education and public education need to be expanded to encourage more students to graduate from high school and continue into higher education. The rapid growth in the region will require many new qualified employees in health care and teaching.

Considering the large number of institutions in the region and the large and quickly growing population, there are many disciplines that should be reviewed to see if there is sufficient need, student interest, and faculty/resources available to establish needed programs. The institutions in South Texas should work together in this endeavor. A large number of high-demand programs are not available, so priorities must be set for the development of those with the highest level of need.

The **Upper Rio Grande** has low high school educational attainment levels among its adult (over 25) population. To improve this over time, it is important to continue to emphasize P-16 collaborations, here and throughout the state, to encourage and mentor students to complete high school and continue into college. Adult education efforts remain critical, as in all regions where high school attainment levels of the adult population are low.

The distance between El Paso (the city with the majority of the region's population) and the rest of the state and the fact that so many students remain in the region to attend college make it essential that program offerings support the needs of the region.